EPA ENFORCEMENT PRIORITIES AND PRACTICES

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

SECOND SESSION

JUNE 6, 2012

Serial No. 112–147

Printed for the use of the Committee on Energy and Commerce
energycommerce.house.gov

U.S. GOVERNMENT PRINTING OFFICE

79–849 PDF WASHINGTON : 2013

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON ENERGY AND COMMERCE

FRED UPTON, Michigan
Chairman

JOE BARTON, Texas
Chairman Emeritus
CLIFF STEARNS, Florida
ED WHITFIELD, Kentucky
JOHN SHIMKUS, Illinois
JOSEPH R. PITTS, Pennsylvania
MARY BONO MACK, California
GREG WALDEN, Oregon
LEE TERRY, Nebraska
MIKE ROGERS, Michigan
SUE WILKINS MYRICK, North Carolina
Vice Chairman
JOHN SULLIVAN, Oklahoma
TIM MURPHY, Pennsylvania
MICHAEL C. BURGESS, Texas
MARSHA BLACKBURN, Tennessee
BRIAN P. BILBRAY, California
CHARLES F. BASS, New Hampshire
PHIL GINGREY, Georgia
STEVE SCALISE, Louisiana
ROBERT E. LATTA, Ohio
CATHY McMORRIS RODGERS, Washington
GREGG HARPER, Mississippi
LEONARD LANCE, New Jersey
BILL CASSIDY, Louisiana
BRETT GUTHRIE, Kentucky
PETE OLSON, Texas
DAVID B. McKINLEY, West Virginia
CORY GARDNER, Colorado
MIKE POMPEO, Kansas
ADAM KINZINGER, Illinois
H. MORGAN GRIFFITH, Virginia

HENRY A. WAXMAN, California
Ranking Member
JOHN D. DINGELL, Michigan
Chairman Emeritus
EDWARD J. MARKEY, Massachusetts
EDOLPHUS TOWNS, New York
FRANK PALLONE, JR., New Jersey
BOBBY L. RUSH, Illinois
ANNA G. ESHOO, California
ELIOT L. ENGEL, New York
GENE GREEN, Texas
DIANA DEGETTE, Colorado
LOIS CAPPS, California
MICHAEL F. DOYLE, Pennsylvania
JANICE D. SCHAKOWSKY, Illinois
CHARLES A. GONZALEZ, Texas
TAMMY BALDWIN, Wisconsin
MIKE ROSS, Arkansas
JIM MATHESON, Utah
G.K. BUTTERFIELD, North Carolina
JOHN BARROW, Georgia
DORIS O. MATSUI, California
DONNA M. CHRISTENSEN, Virgin Islands
KATHY CASTOR, Florida
JOHN P. SARBANES, Maryland

SUBCOMMITTEE ON ENERGY AND POWER

ED WHITFIELD, Kentucky
Chairman

JOHN SULLIVAN, Oklahoma
Vice Chairman
JOHN SHIMKUS, Illinois
GREG WALDEN, Oregon
LEE TERRY, Nebraska
MICHAEL C. BURGESS, Texas
BRIAN P. BILBRAY, California
STEVE SCALISE, Louisiana
CATHY McMORRIS RODGERS, Washington
PETE OLSON, Texas
DAVID B. McKINLEY, West Virginia
CORY GARDNER, Colorado
MIKE POMPEO, Kansas
H. MORGAN GRIFFITH, Virginia
JOE BARTON, Texas
FRED UPTON, Michigan *(ex officio)*

BOBBY L. RUSH, Illinois
Ranking Member
KATHY CASTOR, Florida
JOHN P. SARBANES, Maryland
JOHN D. DINGELL, Michigan
EDWARD J. MARKEY, Massachusetts
ELIOT L. ENGEL, New York
GENE GREEN, Texas
LOIS CAPPS, California
MICHAEL F. DOYLE, Pennsylvania
CHARLES A. GONZALEZ, Texas
HENRY A. WAXMAN, California *(ex officio)*

C O N T E N T S

EPA ENFORCEMENT PRIORITIES AND PRACTICES

WEDNESDAY, JUNE 6, 2012

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 2322 of the Rayburn House Office Building, Hon. Ed Whitfield (chairman of the subcommittee) presiding.

Members present: Representatives Whitfield, Sullivan, Shimkus, Burgess, Bilbray, Scalise, Olson, McKinley, Gardner, Pompeo, Griffith, Barton, Upton (ex officio), Rush, Green, Gonzalez, and Waxman (ex officio).

Staff present: Gary Andres, Staff Director; Charlotte Baker, Press Secretary; Michael Beckerman, Deputy Staff Director; Anita Bradley, Senior Policy Advisor to Chairman Emeritus; Maryam Brown, Chief Counsel, Energy and Power; Allison Busbee, Legislative Clerk; Patrick Currier, Counsel, Energy and Power; Cory Hicks, Policy Coordinator, Energy and Power; Heidi King, Chief Economist; Ben Lieberman, Counsel, Energy and Power; Mary Neumayr, Senior Energy Counsel; Andrew Powaleny, Deputy Press Secretary; Krista Rosenthall, Counsel to Chairman Emeritus; Chris Sarley, Policy Coordinator, Environment and Economy; Michael Aylward, Democratic Professional Staff Member; Jeff Baran, Democratic Senior Counsel; Phil Barnett, Democratic Staff Director; Alison Cassady, Democratic Senior Professional Staff Member; Greg Dotson, Democratic Energy and Environment Staff Director; and Caitlin Haberman, Democratic Policy Analyst.

Mr. WHITFIELD. The hearing will now come to order.

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Today's hearing is on EPA enforcement priorities and practices. I would note that we had expected Dr. Al Armendariz to testify here today. He is the former Region 6 Administrator, and we were disappointed that he chose to cancel yesterday afternoon. We do intend to explore the reasons for his failure to appear.

As I said, the title of today's hearing is "EPA Enforcement Priorities and Practices," and I hope that at least one result of this hearing will be when it is over that Administrator Jackson and some others at EPA will think more about working in a cooperative atti-

tude and spirit with the entities and the States that they deal with rather than an adversarial attitude and spirit.

Now, why do I say that? Well, I am going to give you some examples. Number one, Mr. Armendariz himself. We all know the statement that he made before a city council meeting in Texas in which he said, "When the Romans went into a community, they would find five citizens and they would crucify them, and after that they wouldn't have any trouble," and he said "That is what we need to do in the oil and gas industry." That is not the type of attitude we need from public employees.

In the Range Resources case, which is another example of the approach to enforcement that concerns us, in that case EPA issued an emergency compliance order against a drilling company based on false accusations, even though Texas regulators warned EPA it was premature and the facts were not known. In the end, EPA did withdraw the order, but not until after the company was forced to spend millions of dollars to defend itself against EPA's false claims.

EPA's efforts relating to the Texas Flexible Air Permits provide another example of aggressive and unprecedented regulatory actions. This permitting program had been in effect since President Clinton's administration and was working very well to improve the State's air quality. EPA took upon itself to federalize this program and compel more than 100 major facilities to go through a process EPA called deflexing.

It isn't just Congressional Republicans who think that EPA is overreaching. An increasing number of Federal judges do also. In the recent Sackett decision, the Supreme Court unanimously rejected EPA's efforts to deny due process to landowners. One of the judges wrote that "The position taken in this case by the Federal Government would have put the property rights of ordinary Americans entirely at the mercy of Environmental Protection Agency employees." He further said that "In a Nation that values due process, not to mention private property, such treatment is unthinkable." In another case, the Luminant case in the Fifth Circuit Court of Appeals, that court rejected EPA's attempts and said that EPA's disapproval was based on "purported nonconformity with three extrastatutory standards that the EPA had created itself out of whole cloth."

In the recent Spruce Mine case decision, another Federal judge invalidated an attempt by EPA to rescind a coal mining permit. The court called EPA's rationale "magical thinking" and "a stunning power for an agency to arrogate to itself."

And in the Avenal case last year, a court rejected EPA's claim it was not bound by the Clean Air Act's statutory requirement to make a permitting decision within 1 year. The court said, "The EPA's self-serving misinterpretation of Congress's mandate is too clever by half and it is an obvious effort to protect its regulatory process at the expense of Congress's clear intention." And then the court went on to say, "Put simply, that dog won't hunt."

So we believe, many of us believe, EPA is out of control. They are more interested in being an adversary than working in a cooperative spirit. And so that is what we hope to explore in today's hearing.

[The prepared statement of Mr. Whitfield follows:]

Opening Statement of the Honorable Ed Whitfield
Subcommittee on Energy and Power
Hearing on "EPA Enforcement Priorities and Practices"
June 6, 2012

(As Prepared for Delivery)

I would note that we had expected Dr. Armendariz to testify here today and we are disappointed he chose to cancel yesterday afternoon. We do plan to get to the bottom of the reasons for his failure to appear.

I've been concerned about the Obama EPA for more than three years now and here are a few examples of why.

The Range Resources case is one very concrete example of the approach to enforcement that concerns us. In the Range Resources case, EPA issued an emergency compliance order against a drilling company based on false accusations, even though Texas regulators warned EPA it was premature and the facts weren't known. In the end, EPA withdrew the order, but not until after the company was forced to spend millions of dollars to defend against EPA's false claims.

EPA's efforts relating to the Texas Flexible Air Permits provide another example of aggressive and unprecedented regulatory actions. This permitting program had been in effect since the Clinton Administration and was working very well to improve the state's air quality. EPA took upon itself to 'federalize" this program and compel more than 100 major facilities to go through a process EPA called "de-flexing."

Those EPA actions do not appear to have the effect of furthering the environmental and public health goals of the Clean Air Act, and the agency's actions strongly do conflict with the state-federal partnership that is at the core of this statute. EPA's unprecedented takeover of greenhouse gas permitting in Texas to promote its climate change agency agenda is another such example as well.

It isn't just Congressional Republicans who think that EPA is overreaching. An increasing number of federal judges do to.

In the recent *Sackett* decision, the Supreme Court unanimously rejected EPA's efforts to deny due process to landowners. Justice Alito concluded:

> "The position taken in this case by the Federal Government . . . would have put the property rights of ordinary Americans entirely at the mercy of the Environmental Protection Agency (EPA) employees." He further said that "In a nation that values due process, not to mention private property, such treatment is unthinkable."

In the recent *Luminant* case relating to EPA's efforts to disapprove Texas's standardized pollution control permit, the Fifth Circuit Court of Appeals rejected EPA's attempts and said that EPA's disapproval was based on "purported nonconformity with three extra-statutory standards that the EPA had created out of whole cloth."

In the recent *Spruce Mine Case* decision, a federal judge appointed by President Obama rejected EPA's unprecedented attempt to invalidate a West Virginia coal mining permit. The court called EPA's rationale "magical thinking" and "a stunning power for an agency to arrogate to itself."

In the *Avenal* case last year, a court rejected EPA's claim it was not bound by the Clean Air Act's statutory requirement to make a permitting decision within one year. The court said" "The EPA's self-serving misinterpretation of Congress's mandate is too clever by half and an obvious effector to protect its regulatory process at the expense of Congress' clear intention. Put simply, that dog won't hunt."

Overall, EPA is an agency that seems to have gotten badly off track from its proper role as a measured, balanced and objective regulator, and I hope that today's hearing will be first step towards a much-needed change in direction.

Mr. WHITFIELD. At this time I would like to yield 2 minutes to the gentleman from Oklahoma, Mr. Sullivan.

OPENING STATEMENT OF HON. JOHN SULLIVAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. SULLIVAN. Thank you, Chairman Whitfield. Thank you for holding this important hearing today to discuss the enforcement practices and priorities of the U.S. Environmental Protection Agency. Today we will be taking a critical look at some of these enforcement practices in EPA Region 6, which includes my State of Oklahoma.

I am pleased to welcome my good friend Bob Sullivan, who is chairman of the Oklahoma Independent Petroleum Association. He is with us to discuss the importance of fossil fuels to our Nation and to share his real-life business experiences with EPA Region 6's enforcement practices on oil and gas producers. Thank you for your advocacy on oil and gas issues at both the State and Federal level.

I am extremely disappointed that former EPA Region 6 director Dr. Al Armendariz decided to cancel his appearance at today's hearing at the last minute, and I think I know why. The American people deserve an honest explanation for his comment saying that the EPA should crucify and make examples out of oil and gas companies, which employ over 9 million Americans. This type of regulatory bullying and abuse underscores the problems we face with EPA's enforcement culture.

Like many Americans, I am pleased that Mr. Armendariz resigned after publicly expressing such hostility and political prejudice toward oil and gas companies, an industry that employs over 300,00 Oklahomans in my State. This blatant political bias is completely unacceptable behavior from a now former government official charged with regulating this critical industry.

The Obama administration's refusal to fire Mr. Armendariz is proof that they are out of touch with the American people when it comes to developing a national energy policy. While I supported Mr. Armendariz's decision to resign, I also challenge the EPA to go even further to root out this troubling trend of hostility towards oil and gas production in order to achieve our goal of powering our Nation with affordable and stable sources of American-made energy.

Mr. Chairman, I yield back the balance of my time.

Mr. WHITFIELD. At this time I recognize the ranking member, Mr. Rush, for his opening statement.

OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINIOIS

Mr. RUSH. Thank you, Mr. Chairman.

Mr. Chairman, I am really somewhat—not somewhat, I am very disturbed at this hearing. Since the beginning of the 112th Congress, by my count, we've had over 30 Energy and Power Subcommittee and joint committee hearings—over 30—and we have held over a dozen subcommittee and full committee markups, and we have had nine bills that originated from this subcommittee that have been voted on by the full House. Yet from all that time and all that effort and all the taxpayers' dollars that are going into all

this, this subcommittee has produced exactly one bill—let me repeat: one bill, the Pipeline Safety Reauthorization Act—that has actually become law.

Now, here we go again. Mr. Chairman, when will the other side understand that the EPA stands for the Environmental Protection Agency and not Every Problem in America Agency. EPA is the Environmental Protection Agency, not the Every Problem in America Agency. While attacks on the EPA and the Clean Air Act may appease some of the more extreme constituency that the majority side represents, most American people, particularly those who are facing economic crises in their lives and their families and their homes and in their neighborhoods, they want to see us working in a bipartisan manner to address critical issues such as access to jobs, clean air, clean water, less dependency on foreign oil and enhanced energy efficiency measures, and an increased reliance on cleaner and renewable energy sources for the future. Those are the issues they want us to be working on, not some comment that some unemployed or some ex-member of the EPA, who is no longer in government, not someone who is no longer a part of the Federal Government. They don't want us to focus on some stupid statement that he made some time ago. They want us to focus on the issues that are before them right now and the issues that they are concerned about.

But here we are, cameras all over the place, showing off, showing how angry we are about the statement that was taken out of context of an ex-government employee, a former EPA staffer who is going on with his life and won't be here—I am pretty sure he won't be here ever again. But why are we wasting time? You know, you want an opportunity to profile and parade before the cameras, you want an opportunity to try to embarrass the Obama administration? Well, I think we are the ones who should be embarrassed. But we know that not one constructive thing is going to happen today, not one thing. Not one scintilla of solution for the American people is going to come out of the time that we are wasting here today.

Mr. Chairman, with all due respect to the witnesses who are here, I believe our time would be better served by working in a bipartisan manner to enact policy that some day may actually move this Nation and its energy agenda forward.

Mr. Chairman, I thank you and I want to yield the balance of my time to my friend from Texas.

OPENING STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GREEN. Thank you, Mr. Chairman, and I want to thank our ranking member for yielding me time and holding this hearing.

I want to first welcome two Texans to our committee, our Chair of our Texas Railroad Commission that actually regulates oil and gas in Texas, Barry Smitherman. I have known Barry's family for decades, a good family, a Houston family, although hill country now. And also the Chair of our Texas Commission on Environmental Quality, Bryan Shaw.

I regret the reason we are holding this hearing today, and I had planned to praise Dr. Armendariz for agreeing to testify since he

resigned, but canceling at the last minute is disrespectful to our committee, and some of us who actually remember a subcommittee hearing we had in Houston that our Regional Administrator couldn't appear but he was literally two blocks from our hearing there at South Texas College of Law. I am disappointed he chose not to do it but I want to thank our other panelists for being here, especially our Texas witnesses.

The oil and gas industry has been and will continue to be a vital economic engine for our country, and EPA officials should not use negative language against the oil and gas industry without cause. While Dr. Armendariz's comments may have been meant as an analogy, if you take them in context of actions taken by EPA Region 6, they reveal a troubling trend of hostility toward oil and gas production literally in Texas, Oklahoma and Louisiana and New Mexico that produces a significant amount of the product our country needs.

I am sure many of you saw the Associated Press article last by Dana Cappiello. Dana ran an extensive analysis of enforcement data over the past decade and found that EPA went after producers more often under the Bush than under this administration. I think that is fine and good, but I also think it speaks volumes about the great care our companies are putting into ensuring their exploration and production activities do no harm to the environment, given the number of wells had actually increased in recent years. However, the AP numbers didn't reflect violation notices and emergency orders which have been a true problem within this current administration. Take, for example, what famously happened in Parker County. The EPA preempted the Railroad Commission, issued an emergency administrative order alleging hydraulic fracking had made the water unsafe when the data did not support the EPA's claim. Ms. Cappiello's numbers also don't reflect Dr. Armendariz's choosing to attend that conference literally two blocks away from our Energy and Commerce Energy Subcommittee hearing when we were discussing EPA's decision to disapprove the Texas Flexible Air Permit program. The hearing and the forum were just blocks away, and these instances tell a very different story and I regret that Dr. Armendariz is not here to explain his rationale.

Mr. Chairman, I hope this hearing is constructive and we can move forward, not only in Region 6 but our effort in our committee to produce the energy that our country needs, and I yield back my time.

Mr. WHITFIELD. Thank you.

At this I recognize the chairman of the committee, Mr. Upton of Michigan, for 5 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman.

Let us be honest: Under this administration's EPA, the extreme has become routine, and that is why, when video surfaced of Dr. Armendariz talking about his "crucify" enforcement strategy, it really rang a bell with those of us in Congress who oversee the agency, not to mention those who have to deal with the economic

consequences back home. His words provided a window into a pervasive mindset driving a long list of problematic enforcement and regulatory actions by the agency.

To understand that mindset, we sought to hear from him directly. In fact, earlier this week he confirmed that his testimony would arrive on time on Sunday. He volunteered to come. After all, it was his comments that so clearly embodied the hostile enforcement policy that we have seen in action for the last couple of years. And unfortunately, late yesterday afternoon, very late yesterday afternoon, an attorney representing him contacted the committee staff to notify us that despite his earlier agreement to come, he was no longer willing to testify. Well, we would like to know why, and why, several weeks after he had agreed to testify, did he retain counsel and then withdraw? The EPA, did they interfere with this witness? We don't know. But I have in my hand a couple copies of letters that we intend to send today to the EPA and to Dr. Armendariz to ask those questions. Congress and the American people deserve answers about the administration's policies and practices, and we intend to get them. But even without his appearance today, we are going to scrutinize the agency's actions by hearing directly from those on the receiving end of their enforcement.

Over and over, we have seen EPA treating job-creating energy companies as if they were the enemy. We have seen new regulations that defy any credible reading of the authority delegated to the agency. EPA's attitude toward the private sector is troublesome enough, but its treatment of non-Federal levels of government is hardly any better, and I would remind everyone that the very first section of the Clean Air Act states that "air pollution control at its source is the primary responsibility of states and local governments."

So today we are going to hear from those State, local and tribal officials whose longstanding working relationship with the Federal EPA has deteriorated considerably under this administration.

The Clean Air Act has effectively balanced economic growth and environmental improvement for decades, and I am concerned that EPA has gotten far away from that balance.

I yield my time now to Mr. Barton.

[The prepared statement of Mr. Upton follows:]

Statement of Chairman Fred Upton
Subcommittee on Energy and Power
Hearing on EPA Enforcement Priorities and Practices
June 6, 2012

(As Prepared for Delivery)

Let's be honest – under the Obama EPA, the extreme has become routine. That's why, when video surfaced of Dr. Al Armendariz talking about his "crucify" enforcement strategy, it really rang a bell with those of us in Congress who oversee the agency, not to mention those who have to deal with the economic consequences back home. His words provided a window into a pervasive mindset driving a long list of problematic enforcement and regulatory actions by the agency.

To understand that mindset, we sought testimony from Dr. Armendariz. After all, it was his comments that so clearly embodied the hostile enforcement policy we have seen in action for the past three years.

Unfortunately, late yesterday afternoon, an attorney representing Dr. Armendariz contacted the committee staff to notify us that – despite his earlier agreement to appear – Dr. Armendariz was no longer willing to testify. Well, I'd like to know why not. Why, several weeks after he had agreed to testify, did he retain counsel and withdraw? The EPA did not make a witness available to appear alongside Dr. Armendariz today. Did the Obama administration urge him not to appear?

I have in my hand copies of letters we intend to send today to the EPA and to Dr. Armendariz to ask those questions. Congress and the American people deserve answers about this administration's policies and practices, and we intend to get them. But even without Dr. Armendariz here today, we are going to scrutinize the agency's actions by hearing directly from those on the receiving end of their enforcement.

Over and over, we have seen EPA treating job-creating energy companies as if they were the enemy. We have seen new regulations that defy any credible reading of the authority delegated to the agency.

EPA's attitude toward the private sector is troublesome enough, but its treatment of non-federal levels of government is hardly any better. I would remind everyone that the very first section of the Clean Air Act states that "air pollution control at its source is the primary responsibility of states and local governments." But today, we will hear from state, local, and tribal officials whose longstanding working relationship with the federal EPA has deteriorated considerably under Obama.

The Clean Air Act has effectively balanced economic growth and environmental improvement for decades. I am concerned that EPA has gotten far away from that balance. It is time to get back to what works. Thank you.

OPENING STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. BARTON. Thank you, Chairman Whitfield and Ranking Member Rush for holding this hearing.

I, like Chairman Upton, am disappointed but not surprised that former Regional Administrator Armendariz has chosen not to testify before this subcommittee. As my friend Mr. Green just pointed out, at a field hearing down in Houston, the former Regional Administrator was blocks away, was formally invited to testify and participate at that hearing and again chose not to do so.

The Congress sets the rules, and the administration enforces them. We have a good set of environmental laws on the books. We expect President Obama and his appointees to enforce those rules in an even and fair-handed fashion. In the case of Region 6 Administrator Armendariz, he was not a fair umpire. He had a preconceived mindset, viewed himself more as an executioner than as a fair umpire, as some of his comments have shown. As soon as he became the Region 6 administrator, EPA withdrew a longstanding support of the Texas Flexible Air Permit program that was initiated under President Clinton. The Obama administration through Regional Administrator Armendariz removed that. In the cases of Range Resources, which dealt with the issue of hydraulic fracturing, again, former Regional Administrator Armendariz came into office saying that he wanted to eliminate hydraulic fracturing. He thought he had a case in Range Resources and moved to an enforcement action even when the then-chairman of the Railroad Commission of Texas sent him an email saying that that was premature and that the facts did not justify that. In Idaho just recently, the Obama administration went against a family called the Sacketts on a wetlands issue. Again, Mr. Chairman, Congress sets the rules and the administration enforces them. This Obama administration in the case of the EPA doesn't want to play by the rules. They want to set their own rules, and in some cases literally try to put industry and businesses out of business.

With that, I yield to my good friend from Denton County, Dr. Burgess.

Mr. WHITFIELD. The gentleman is out of time.

At this time I recognize the gentleman from California, Mr. Waxman, for 5 minutes.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you, Mr. Chairman.

In May 2010, then-EPA Regional Administrator Al Armendariz was in DISH, Texas, talking to citizens concerned about oil and gas pollution. When he started describing his philosophy of enforcement, he used a poor analogy involving Romans and crucifixion. Everyone agrees that it was an inappropriate comment.

But those who oppose strong enforcement of the Nation's environmental laws have exaggerated what was said in order to make absurd attacks on EPA and the Obama administration. They claim that Dr. Armendariz intended to take enforcement actions against

innocent companies and that his comments are representative of EPA's overall enforcement philosophy.

This smear attack ignores most of what Dr. Armendariz said that day, and it ignores the facts. Dr. Armendariz has apologized for his controversial comments, and he has resigned. He has made it very clear that those comments were an inaccurate way to describe EPA's enforcement efforts. And it is important to realize that no enforcement action has been taken in DISH, Texas.

EPA Administrator Lisa Jackson and the White House have reiterated that the comments do not reflect any EPA policies or the agency's actions. Despite these clear statements, EPA's critics claim that the controversial Armendariz comments must represent EPA's true enforcement policy. This is just more of the same fact-free, anti-EPA rhetoric from the Republicans.

Here are the facts. The Clean Air Act, Clean Water Act, Safe Drinking Water Act and other cornerstone environmental laws allow States to implement and administer the statutes' requirements. It is EPA's job to ensure that the States implement nationally consistent programs that meet Federal standards.

The States do not always meet these expectations. In fact, the EPA IG recently found that "State enforcement programs frequently do not meet national goals and states do not always take necessary enforcement actions. State enforcement programs are underperforming. ... noncompliance is high and the level of enforcement is low." And in these situations, EPA has the authority to step in to take the action needed to enforce the law.

For decades, these enforcement decisions have been made by career EPA enforcement professionals, not political appointees. That has not changed under this administration.

Since the agency was formed during the Nixon administration, EPA has employed a philosophy of deterrence. EPA punishes violations of the law fairly and openly in order to deter others from breaking the law. And EPA focuses its limited enforcement resources on the highest priorities that represent the most serious pollution problems. There is nothing unique about this approach. In fact, I would be surprised if we could find a well-run law enforcement agency or civil enforcement program in the country that worked differently.

The data tells the story. I have charts. The first chart shows the number of EPA enforcement actions nationwide over the last 11 years. As you can see, the number of enforcement actions during the first 3 years of the Obama administration has actually dropped off slightly compared with the Bush administration years. I see no evidence of an overzealous enforcement policy here.

Let us look at just EPA Region 6. That is the region that Dr. Armendariz led. If his controversial remarks reflected a radical enforcement policy, then surely we would find evidence of that in Region 6. But as you can see from the chart, that is simply not the case. Again, the number of civil enforcement actions is actually lower during the past 3 years than during the Bush years.

The third chart shows that total civil penalties collected under the Obama administration are not much different than under the previous administration. You can see that the totals go up and down each year depending on when bigger cases are resolved. In

fact, the average amount of civil penalties collected during the Bush administration is actually slightly higher than so far under the Obama administration.

Those are the facts. One comment from 2 years ago cannot change the facts. Environmental laws that protect our air and water are important to the health and wellbeing of Americans. The only way to ensure those protections are real is to enforce them. Career employees at EPA have been doing that enforcement work for 40 years, and they should keep doing so to protect American families from toxic chemicals and other pollutants.

Thank you, Mr. Chairman.

Mr. WHITFIELD. Thank you.

That concludes the opening statements today, so I want to welcome once again the first panel, the only panel, and on our panel today we have with us Dr. Bryan Shaw, who is Chairman of the Texas Commission on Environmental Quality. We have Barry Smitherman, who is Chairman of the Texas Railroad Commission. We have Mr. Robert Sullivan, who is Chairman of the Oklahoma Independent Petroleum Association. We have Dr. Joel Mintz, who is a Professor of Law at Nova Scotia University. We have Mr. Stephen Etsitty, who is the Executive Director of the Navajo Nation Environmental Protection Agency. And we have Mr. Allen Short, who is the General Manager of the Modesto Irrigation District in California.

So welcome. We look forward to all of your testimony because you all are the ones that work on a daily basis with the Federal EPA, and we look forward to your insights and comments.

Chairman Smitherman, we will call on you first for a 5-minute opening statement.

STATEMENTS OF BARRY T. SMITHERMAN, CHAIRMAN, TEXAS RAILROAD COMMISSION; BRYAN W. SHAW, CHAIRMAN, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY; ROBERT J. SULLIVAN, JR., CHAIRMAN, OKLAHOMA INDEPENDENT PETROLEUM ASSOCIATION, AND OWNER, SULLIVAN AND COMPANY, LLC; JOEL A. MINTZ, PROFESSOR OF LAW, NOVA SOUTHEASTERN UNIVERSITY; STEPHEN B. ETSITTY, EXECUTIVE DIRECTOR, NAVAJO NATION ENVIRONMENTAL PROTECTION AGENCY; AND ALLEN SHORT, GENERAL MANAGER, MODESTO IRRIGATION DISTRICT

STATEMENT OF BARRY T. SMITHERMAN

Mr. SMITHERMAN. Thank you, Mr. Chairman, Mr. Vice Chairman, members of the committee, especially my friends from Texas. I am Barry Smitherman. I am the Chairman of the Texas Railroad Commission. Thank you for the opportunity to provide my perspective on the enforcement priorities and practices of the Environmental Protection Agency.

As the Chairman of the Railroad Commission, I and my Railroad Commission colleagues are responsible for overseeing the exploration and production of oil, natural gas and lignite coal in Texas. Texas is the Nation's largest producer of oil and natural gas, producing 413 million barrels of oil and 7.4 trillion cubic feet of natural gas in 2011. That translates into 1.1 million barrels of oil a

day and about 20 bcf of natural gas a day. These numbers continue to increase in 2012. In March, we were producing 1.35 million barrels of crude oil a day. That is more than the United States presently imports from Venezuela. We are also the home of 49 percent of all the land-based rigs in America.

This energy production supports 2 million jobs in Texas and is responsible for a quarter of the State's economy. The average oil and gas job in Texas pays about twice what the average non-oil and gas job pays, and these jobs, of course, are vital to the State's economic wellbeing as we continue to be a leader in energy production.

The Railroad Commission, Mr. Chairman, has effectively regulated the energy industry in Texas since 1919. The State has maintained a predictable regulatory environment allowing for prolific yet responsible development, and this successful track record is partially due to the scientists, engineers and policymakers that are closest to the variables being regulated and they are most familiar with all of the elements at play.

State regulation of these industries is critical because in my estimation, it is impossible for blanket Federal regulations to account for the unique circumstances of each State. As has been highlighted several times earlier this morning, recently the EPA has been insinuating itself into areas that have historically been the purview of the States. Let me talk more about the Range Resources case, which was mentioned.

On December 7, 2010, the EPA issued an emergency order against Range Resources for allegedly contaminating a residential water well near Fort Worth. This order was issued despite the fact that the Railroad Commission staff had already advised the EPA that the Commission's investigation was ongoing and that no final conclusions had been reached. Furthermore, we now know that the EPA issued the order even though the EPA did not evaluate the underground geology in the area, did no research to determine possible pathways for the migration of the methane, and was in disagreement with many scientists. The Commission had already secured the voluntary cooperation from the operator, and we were moving quickly to investigate the situation.

The Commission concluded in March of 2011 that Range Resources' fracking activities were not responsible for the contamination of well water. However, the EPA continued with its investigation for another 12 months. Range Resources was forced to spend over $4 million defending itself against unfounded and unprecedented attacks, and then in March of 2012, in a one-paragraph letter, the EPA dropped its emergency endangerment order against the company.

Unfortunately, Mr. Chairman, this is not an isolated incident. We have seen cases in Pavilion, Wyoming, and in Dimock, Pennsylvania, where the EPA has also accused oil and gas operators of groundwater contamination from fracking without sufficient evidence to justify those accusations. I hope, Mr. Chairman, that the result of this hearing today is that EPA will begin to listen and work with local regulators going forward, regulators that know best the circumstances, the underground geology and the facts present in those States.

Thank you very much.
[The prepared statement of Mr. Smitherman follows:]

Written Summary
of
Testimony by Barry T. Smitherman
Chairman, Railroad Commission of Texas
before the
Committee on Energy and Commerce, Subcommittee on Energy and Power
United States House of Representatives
Hearing: EPA Enforcement Priorities and Practices
June 6, 2012

Mr. Chairman, and Members of the Committee:

Thank you for the opportunity to provide my perspective on the enforcement priorities and practices of the Environmental Protection Agency ("EPA").

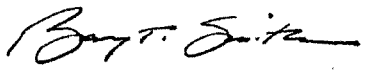
My testimony largely focuses on how EPA's enforcement priorities and practices have affected energy production in the State of Texas. As Chairman of the Railroad Commission of Texas I am responsible for overseeing the nation's leading oil and gas producing state, which produced 413 million barrels of oil and 7.4 trillion cubic feet of natural gas in 2011. Texas has a proven regulatory track record allowing for prolific, yet responsible energy development. It is critical that state regulatory agencies like the Railroad Commission continue to regulate its energy production. Recently, we have seen the many problems that arise when federal agencies like the EPA attempt to usurp regulatory authority from the states.

My testimony focuses on specific problems states have recently encountered with attempted federal regulation by EPA. For instance, EPA has been active in expanding its role regarding hydraulic fracturing. This expansion has led to impractical policies and unsound science. My testimony highlights missteps by EPA in the Range Resources case that took place in Texas, as well as similar troublesome events that occurred in Pavillion, Wyoming and Dimock, Pennsylvania.

My testimony also expresses my concern with EPA's overly broad study of potential impacts of hydraulic fracturing on drinking water.

Furthermore, although the Railroad Commission does not have jurisdiction over air pollution, I discuss grave concerns I have with respect to air pollution regulation by EPA of upstream oil and gas production and downstream power generation.

Sincerely,



Barry T. Smitherman
Chairman
Railroad Commission of Texas

Testimony of Barry T. Smitherman
Chairman, Railroad Commission of Texas
before the
Committee on Energy and Commerce, Subcommittee on Energy and Power
United States House of Representatives
Hearing: EPA Enforcement Priorities and Practices
June 6, 2012

Mr. Chairman, and Members of the Committee:

Thank you for this opportunity to provide my perspective on the enforcement priorities and practices of the Environmental Protection Agency ("EPA").

As Chairman of the Railroad Commission of Texas (the "Commission"), I am responsible for overseeing the exploration and production of oil, natural gas, and lignite coal in Texas. Texas is the nation's largest producer of oil and natural gas with over 161,000 active oil wells and 102,000 active gas wells, which produced 413 million barrels of oil and 7.4 trillion cubic feet of natural gas in 2011. This energy production supports two million jobs in Texas and a quarter of the State's economy. It is vital to the State's economic well-being that Texas continues to be a leader in energy production.

Effective State Regulation of Oil and Natural Gas Production and Surface Waste Management

The Commission has effectively regulated the energy industry in the State of Texas since 1919. The State has maintained a predictable regulatory environment allowing for prolific, yet responsible energy development. This successful track record is partially due to its scientists, engineers, and policymakers being closest to the variables regulated and most familiar with the elements at play. State regulation of energy resources is critical because it is impossible for blanket federal regulations to account for the unique circumstances of each state. Such blanket regulations often lead to impractical policies based on unsound science. Recently, EPA has begun insinuating itself into areas that have historically been the purview of the states by attempting to unleash a barrage of regulations based on politically-motivated fiction, rather than fact. I am extremely troubled by this trend in EPA's enforcement priorities and practices.

In the past, EPA has often stated that it believes Congress intended for it to regulate under the Safe Drinking Water Act's (SDWA) Underground Injection Control (UIC) Program only those wells whose principle function is the subsurface emplacement of fluids, and not wells whose principle function is the production of oil or natural gas. However, EPA has been actively expanding its role regarding hydraulic fracturing operations, as well as other activities associated with oil and gas production that have historically been under state regulation.

The states have successfully regulated oil and natural gas production and surface waste management activities, including hydraulic fracturing, for decades and have the experience and personnel to effectively regulate such activities. Despite the tremendous oil and gas activity in Texas and a 60-year history of hydraulic fracturing, there is not a single proven case connecting hydraulic fracturing to groundwater pollution. EPA Administrator Lisa Jackson recently confirmed this track record when testifying before the U.S. House Oversight and Government Reform Committee by stating, "I am not aware of any proven case where the fracking process has affected water, although there are investigations ongoing."

A majority of the states also effectively administer UIC Programs under the SDWA. The states maintain their regulations adequately address potential risks to underground sources of drinking water posed by the actual hydraulic fracturing operations. EPA has not indicated how it believes current state regulations fail to protect underground sources of drinking water.

Texas has enforcement primacy for the federal UIC Program. UIC Program duties and funding are split between the Commission and the Texas Commission on Environmental Quality ("TCEQ"). Federal funds allocated to the Commission average approximately $500,000 per year. The Commission has authority over Class II (oil and gas) and Class III (partial-brine mining). The Commission has not yet applied for authority over EPA's recently created Class VI (geologic sequestration of anthropogenic carbon dioxide) UIC Program.

After a 2004 EPA study of hydraulic fracturing of coal bed methane wells indicated some concern with the use of diesel fuel in hydraulic fracturing, Congress amended the SDWA. Section 322 of the Energy Policy Act of 2005 amended the UIC portion of the SDWA (42 USC 300h(d)) to define "underground injection" to exclude "...the underground injection of fluids or propping agents (*other than diesel fuels*) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities" (emphasis added). The language is unclear

and open to interpretation. EPA itself did not clarify what it believed the language to mean until the summer of 2010, when it revised certain wording on its webpage regarding the activity. At that time, EPA undertook no rulemaking in changing its interpretation, nor did it issue any notice of the change to regulators or the regulated community.

In April of 2012, EPA published for comment a draft guidance document for permitting of wells in which diesel fuel is to be used in hydraulic fracturing treatments. EPA has classified wells on which hydraulic fracturing treatments are performed as Class II injection wells, and has recommended all of the requirements for existing Class II wells in addition to numerous other requirements to address what EPA perceives as the additional risks posed by hydraulic fracturing. This will effectively be the first time the federal government has regulated the drilling, completion, and production of oil and natural gas wells on non-federal lands. Because EPA is proposing to define the term "diesel fuel" very broadly, and because EPA failed to include a de minimis threshold for whatever it ultimately defines as "diesel fuel," numerous oil and natural gas wells potentially could be classified as Class II UIC wells requiring a UIC permit.

Although the stated purpose of this guidance document is to assist EPA permit writers in areas and states where EPA is the permitting authority, such guidance can become the standard. The Commission contends that the Class II UIC program requirements, which are designed for long-term continuous injection activities, are not appropriate for hydraulic fracturing.

EPA Attempts to Issue Guidance Documents Rather Than Rulemaking

Furthermore, EPA is proposing these requirements in a guidance document rather than as rules. Recently, several courts have cautioned EPA that it cannot circumvent the rulemaking process and violate the Administrative Procedures Act by issuing guidance in lieu of formal regulations developed through a notice and comment rulemaking process to change environmental rules. Adoption of requirements by guidelines rather than through rulemaking can result in capricious enforcement, particularly because guidelines can be revised at any time.

For example, in *National Mining Association v. Jackson*, the D.C. Circuit Court of Appeals rejected EPA's reliance on guidance documents in lieu of rulemaking.

In July of 2011, in *Natural Resources Defense Council v. EPA*, the D.C. Circuit Court of Appeals held that EPA violated the Clean Air Act's plain language and violated the Administrative Procedure Act by relying on interpretive guidance – rather than a regulation – to allow states to propose alternatives to statutorily required fees for ozone non-attainment areas under the Clean Air Act.

Two Supreme Court decisions, *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (2001) and *Rapanos v. United States* (2006), focused on the federal government's jurisdiction over various wetlands. We understand that EPA is continuing to expand its power despite restrictions imposed by the U.S. Supreme Court by moving forward with its controversial "waters of the U.S." guidance under the Clean Water Act, which would significantly expand EPA's regulatory reach. EPA is expected to eliminate the term "navigable" from the definition of "waters of the U.S.," which would expand Clean Water Act jurisdiction to even small depressions and ditches that carry only rainwater. By relying on informal guidance, rather than proper rulemaking procedures, to expand federal jurisdiction over state waters and private property, EPA and the Corps are effectively avoiding legal obligations that would otherwise apply to agency action under the Administrative Procedures Act

Problematic Practice of EPA Inappropriately Issuing Enforcement Orders

Soon after EPA Region VI Administrator Dr. Al Armendariz spoke of crucifying oil companies like the Romans used to crucify villagers, EPA targeted operators in Texas, Wyoming, and Pennsylvania. EPA deliberately created a public media frenzy in these three cases by asserting that hydraulic fracturing had caused water pollution, only to quietly withdraw or temper those false accusations at a later date once proven wrong.

On December 7, 2010, EPA issued an emergency endangerment order against Range Resources, a Texas natural gas company, for allegedly contaminating a residential water well near Fort Worth, Texas. The order stated that "EPA has determined that appropriate State and local authorities have not taken sufficient action to address the endangerment described herein and do not intend to take such action at this time . . . ." EPA ignored the fact that Commission staff had already advised EPA that the Commission's investigation was ongoing and that no final conclusions had been reached. According to documents released as a result of Range Resources' lawsuit against EPA regarding the emergency endangerment order, we now know that EPA did not

evaluate the geology in the area, did not research to determine possible pathways for migration of methane to groundwater, and was not in agreement with all of its scientists on EPA's conclusions.

EPA acted prematurely. Before EPA issued its order, Commission staff advised EPA that a specific source of contamination was still unknown and that the investigation was ongoing. EPA was also informed that the Commission had secured voluntary cooperation from the operator, including measures to assure safety in the affected household. All parties agreed that natural gas was present in the water wells; however, the Commission advised EPA that evidence indicated the gas was present in area water well aquifer prior to the commencement of Range Resources' activities.

EPA acted without reviewing all available information. We are not convinced that the presence of the gas in the water wells posed an "imminent and substantial danger" to human health. One water well owner had disconnected his water well from the residence and air monitoring of the residence never indicated a threat of explosion. The other water well owner never filed a complaint with the Commission. Reportedly, the well owner was aware of natural gas and was managing it with an open holding tank that vented any gas before the water was used. Moreover, state and local authorities had been actively investigating the matter since August of 2010, had not determined whether there was a connection between Range Resources' activities and the gas in the water wells, and had secured commitments from the company to expand the investigation. The Commission advised EPA of those commitments before EPA issued the emergency order.

EPA relied on faulty science. Based on the evidence presented at a Commission hearing, the Commission Hearing Examiners concluded, and the Commissioners agreed, that gas in the water wells in question was from the Strawn Formation, which is in direct communication with the Cretaceous aquifer in which the water wells are completed. There was no evidence to indicate that the natural gas production wells were the source of the gas in the water wells. The entire investigative and adjudicative process was conducted with administrative efficiency at the Commission in only seven months, compared to the 20 months spent by EPA.

The appropriate geochemical parameters for fingerprinting to distinguish Strawn gas of Pennsylvania age from Barnett Shale gas of Mississipian age, are nitrogen and carbon dioxide, not carbon (as used by EPA). Gas from Pennsylvanian age rock, including Strawn, has higher nitrogen concentration and lower carbon dioxide

concentration than Barnett Shale gas. Gas found in the water wells does not match the nitrogen isotopic fingerprint of Barnett Shale gas. Bradenhead gas samples from both production wells do not match Barnett Shale gas, confirming that gas was not migrating up the wellbores and that the Barnett Shale producing interval in the wells was properly isolated. Three-dimensional seismic data indicated no evidence of faulting in the area of the water wells and microseismic data available for more than 320 fracture stimulations in Parker County indicated a maximum fracture height of approximately 400 feet, meaning that almost one mile of rock exists between the highest fracture and the shallow groundwater aquifer.

Range Resources was forced to spend over four million dollars defending itself against EPA's persecution, not including income lost from halted production. In March 2012, after more than a year in a federal court battle with Range Resources, EPA dropped its emergency endangerment order against the company.

Equally troubling was well owner Steve Lipsky's attempt to extort $6.5 million from Range Resources during this process. On January 27, 2012, District Court Judge Trey Loftin threw out Mr. Lipsky's lawsuit against the company, ruling that Lipsky lacked legal jurisdiction because the Commission had already determined that Range Resources' gas wells were not responsible for contaminating the water well. On February 16, 2012, Judge Loftin subsequently issued another Order against Mr. Lipsky, expressing concern that Lipsky, under the advice or direction of Alisa Rich, an environmental consultant, attached a hose to the water well's gas vent, not to a water line, and then lit the gas from the hose's nozzle. Judge Loftin stated "[the] demonstration was not done for scientific study but to provide local and national news media a deceptive video, calculated to alarm the public into believing the water was burning." Judge Loftin also cited evidence that Ms. Rich had sought to mislead the EPA.

The Range Resources case is not an isolated incident. EPA has acted with similar haste in Pavillion, Wyoming and Dimock, Pennsylvania, where EPA accused oil and gas operators of groundwater contamination from their hydraulic fracturing operations without sufficient evidence to justify those accusations. In both these cases, like with Range Resources, EPA ignored the facts and the science, whipped the public into hysteria, and then quietly backed away from its initial allegations.

EPA's actions relating to emergency orders was brought to the attention of the United States Supreme Court in *Sackett v. EPA*. On March 26, 2012, the Supreme Court in a unanimous decision found in favor of an

Idaho couple, asserting that, when it comes to wetlands, "arbitrary and capricious" EPA compliance orders can indeed be challenged in court without having to wait for EPA to take enforcement action.

I hope that EPA takes heed of past experiences and begins listening to and working with knowledgeable parties at the state level to ensure the use of fact-based, reliable science and avoid further embarrassments. Due to EPA's recent missteps and Dr. Armendariz' overt political activism we must – at minimum – have a full investigation of Dr. Armendariz' actions during his tenure as administrator so that we may determine how often, and to what extent, he crossed the line and harmed our economy and our energy future by pursuing his extreme political agenda instead of science and fact.

EPA's Study on Hydraulic Fracturing

In a Fiscal Year 2010 appropriations bill, Congress urged EPA to "carry out a study of the relationship between hydraulic fracturing and drinking water, using a credible approach that relies on the best available science, as well as independent sources of information." EPA's original scoping document for this study proposed a study of the "Full Life Cycle" of an oil and gas well. In other words, the scope included all areas of oil and natural gas exploration and production activity, such as site selection and development, as well as production, storage, and transportation, which are unrelated to hydraulic fracturing and clearly under the purview of the states. After review, the EPA's Science Advisory Board recommended that EPA direct its initial, short-term research to study sources and pathways of potential impacts of hydraulic fracturing on water resources, especially potential drinking water sources. In spite of the fact that EPA narrowed the scope of the study in its *Draft Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources* released on February 7, 2011, it still proposes to include in the study areas beyond the specific practice of hydraulic fracturing, delving into areas beyond the reach of federal law, such as water availability and water withdrawal.

Although the Commission does not have jurisdiction over air pollution, I have been carefully watching and reviewing, in concert with TCEQ, the EPA's recent actions with respect to air pollution regulation of upstream oil and gas production and downstream power generation.

EPA's Expanding Regulation of Air Pollution

New Source Performance Standards and National Emissions Standards for Hazardous Air Pollutants

Under the Clean Air Act ("CAA"), EPA is required to review New Source Performance Standards ("NSPS"), National Emissions Standards for Hazardous Air Pollutants ("NESHAP"), and residual risk standards every eight years. The final NSPS and NESHAP regulations for oil and gas, which were signed on April 17, 2012, are the first federal air standards for wells that are hydraulically fractured and for other sources of air pollution in the oil and gas industry not currently regulated at the federal level. These regulations greatly expand EPA's federal authority into oil and gas production activities, which have generally been under state regulation. In addition, EPA appeared reasonable and conciliatory only because it initially proposed unreasonable regulations and then eliminated a few of the most egregious in the final version after discussions with industry.

Cross-State Air Pollution Rule

Last September I testified before the United States House Committee on Science, Space, and Technology regarding the lack of science behind the EPA's controversial Cross-State Air Pollution Rule ("CSAPR"). I testified that CSAPR was an arbitrary, job-killing rule grounded in unreliable and incomplete scientific data. CSAPR would require significant reductions of SO2 and NOx from fossil fuel-fired power plants in 27 states in an effort to regulate emissions from power plants in "upwind" states that allegedly contribute to air quality degradation in "downwind" states. The rules have a disproportionate impact on Texas and an unreasonable timeline for compliance that could result in premature retirement of power plants and could threaten the stability of Texas' power grid.

On July 6, 2011, EPA finalized CSAPR, which requires a significant reduction in SO2 and NOx, both of which are products of the direct process of creating electricity from lignite and natural gas. Despite the fact that Texas' sulfur dioxide emissions make up only 11 percent of those emissions for states covered by the new rule, EPA mandates that 25 percent of the required reductions come from Texas alone. In addition, the final draft is substantially different from the initial draft, leaving no opportunity for public discussion. Moreover, the timeline for compliance is not just unreasonable, but also technically impossible. The rules would require that Texas generating companies comply with this 1,300-page rule by an infeasible date of January 1, 2012. Fortunately, last December, the United States Court of Appeals for the D.C. Circuit issued its ruling to stay CSAPR pending judicial review. The D.C. Circuit was right to stay this highly flawed rule, which is based on inaccurate and incomplete information.

Mercury and Air Toxics Standards for Utilities

On February 16, 2012, EPA finalized the Mercury and Air Toxics Standards for power plant emissions. EPA states that these first national standards will reduce emissions of mercury and toxic air pollution like arsenic, acid gas, nickel, selenium, and cyanide. EPA's own analysis estimates that the rule will cost $10 billion annually – 40 percent more than the total cost of all the Clean Air Act regulations EPA has ever imposed on power plants. Furthermore, the U.S. Chamber of Commerce estimates that 99.99 percent of the benefits EPA derives from the rule actually occur from reductions, not in mercury but particulate matter, a pollutant already extensively regulated by other EPA rules. To make matters worse, the rule already has resulted in the announced shutdown of numerous coal-fired power plants, placing utility grids and jobs at risk.

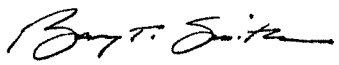
New Source Performance Standards for Greenhouse Gas Emissions from Power Plants

On April 13, 2012, EPA published NSPS for emissions of carbon dioxide for new affected fossil fuel-fired electric utility generating units ("EGUs"). The proposed requirements, which are strictly limited to new sources, would require new fossil fuel-fired EGUs greater than 25 megawatt electric to meet an output-based standard of 1,000 pounds of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle ("NGCC") technology.

The proposed NSPS are EPA's first proposed numeric greenhouse gas ("GHG") emission limits for any category of industrial facility, and will have a significant impact on new power plants. EPA's approach to the final standards is also likely to establish precedents for EPA's regulation of GHG emissions from other types of facilities.

Thank you for the opportunity to testify before the Committee and for your attention to this urgent matter.

Sincerely,



Barry T. Smitherman
Chairman
Railroad Commission of Texas

Mr. WHITFIELD. Thank you, Mr. Smitherman.
At this time, Mr. Shaw, you are recognized for 5 minutes.

STATEMENT OF BRYAN W. SHAW

Mr. SHAW. Thank you. Good morning, Chairman Whitfield, Ranking Member Rush. I am Dr. Bryan Shaw, the Chairman of the Texas Commission on Environmental Quality, and I appreciate the opportunity to visit with you today about many issues ongoing with the relationship between EPA and specifically the State of Texas.

I am not interested and I am not here specifically to pile on to Dr. Armendariz and his time as Region 6 Administrator. Instead, I think it is important that we recognize the pattern and the philosophy that his comments represented that seemed to be consistent with what we have seen through recent EPA actions, specifically the enforcement activity as well as regulation, and not just suggesting that the number of regulations or enforcement cases went up, but the failure to have a just and reasonable and fair regulatory process and enforcement policy, which is demonstrated not only in the examples that you have heard cited today but also what we have seen in other rulemakings such as the Flexible Permits program, which you discussed earlier, whereby EPA did not apply science and the law to overturn Texas's program but instead wishes to impose what they desire short of the Clean Air Act and Federal regulations. And to that end, Dr. Armendariz, after Texas having gone through the process of trying to explain how the Flexible Permits program did indeed meet the requirements of the Clean Air Act and met those concerns that they published in the Federal Register, the response that he said—I believe Gina McCarthy was in the room at the time—was that EPA was not interested and did not want to have a Flexible Permit program, a very similar type of philosophy in that EPA was not interested in making sure that the State program met Federal requirements or even that we were achieving our environmental goals, but instead wanting to make sure that their politically driven policies were in place.

And that is why I am here today, hoping that we can, as Chairman Smitherman talked, encourage EPA to work with us as partners to recognize that relationship that we should have between State and Federal government so that we can follow. Our goal at TCEQ, to have sensible regulations that address real environmental risk while encouraging economic growth. We do that with regulations that are based on science and compliance with State and Federal statutes, and in every case that we disagree with EPA and have a lawsuit on many of those, it is because of their actions not being consistent with that principle of sound science, reasonable approach where we follow the law, and common sense applied to that.

I mentioned the Flexible Permits program as a prime example of their failure to follow that process. And in fact, Dr. Armendariz was one of the key leaders in unraveling that program, which was in place for 15 years, which was one that led to numerous environmental benefits. And when asked to produce a single instance where the Flexible Permits program demonstrated a failure to follow Federal law or even the requirement to reduce those emissions, that did not occur. EPA stood by their desire, not the demonstra-

tion of any concerns in the Federal Register or Clean Air Act that the program didn't meet Federal requirements, but instead they didn't "want" the Flexible Permit program. As a result, 65 Flexible Permits in Texas have been "deflexed," the term that was used, and EPA basically uses that to refer to those that have SIP-approved permits.

There are 36 permit applications that are pending in-house, and we have not seen additional flex permit holders that have made commitments to deflex, but their applications are still pending. The deflex process has been an incredible waste of money and resources for both the permit holders and the environmental agency with no environmental benefit; to be clear, no environmental benefit. To date, not one deflexing permit action has revealed a circumvention and emissions violation that EPA claimed were being hidden by those flexible permits. No additional emission limitations, additional controls required or additional conditions have been added to any of those permits as a result of EPA's actions.

I would like next to move to another example of this failure to follow the common practice in the rules and regulations in place. It is our UIC, Underground Injection Control program, as it relates to uranium mining. And EPA has deviated from what has been a 30-year practice of complying largely with their requirement that is mandated in Federal statutes that they approve or deny within 90 days of submission of requests for aquifer exemption to allow in situ uranium mining. We have two cases whereby EPA has created two new requirements, modeling requirements, that are not captured in the statutes nor are they captured in EPA's guidance documents. We submitted letters to EPA recommending approval of those aquifers for exemption. They sent back letters requesting modeling, which is something that has never been required. They want modeling for 75 years' life and to demonstrate that no drinking water will be impacted, and yet they can't demonstrate where our approved program has ever led to failure in the drinking water process. So I am hopeful that we can find and move toward a more productive relationship with EPA.

Thank you.

[The prepared statement of Mr. Shaw follows:]

U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy and Power– June 6, 2012
"EPA Priorities and Practices"
Testimony of Dr. Bryan W. Shaw, Chairman of the TCEQ

The Texas Commission on Environmental Quality (TCEQ) regularly weighs matters that affect the environment and economy. Our goal is sensible regulation that addresses real environmental risks, while being based on sound science and compliance with state and federal statutes. In every case where Texas disagrees with EPA's action, it is because EPA's actions are not consistent with these principles.

Flexible Permits

Texas' Flexible Permits Program was established in 1994 in an effort to incentivize grandfathered operations to voluntarily enter into the State's air permitting and environmental regulation program. Facilities that were exempted from permitting because of their grandfathered status agreed to submit to state regulation because the program offered them operational flexibility. In exchange for emissions reductions, participants were authorized to allocate emissions on a plant wide basis, rather than by individual emission source. The end result was a program that gave owners and operators greater flexibility and control – but that reduced emissions and complied with all state health standards and all applicable federal Clean Air Act requirements.

At the time that the TCEQ established the Flexible Permits Program, Texas had a large number of "grandfathered" facilities that pre-dated the State's permitting program, which did not begin until 1971. As the EPA acknowledges, neither the EPA nor the TCEQ had statutory authority to impose permitting controls on – or require permits for – these grandfathered facilities.

Because of the Flexible Permits Program – and the enactment of Texas laws that later imposed mandatory permitting requirements – there are no longer any grandfathered facilities in the State of Texas. It is worth noting that some of these facilities are still grandfathered from federal permits.

The TCEQ submitted its Flexible Permits Program rules to the EPA for approval in 1994. Although the TCEQ issued flexible permits without interference from the federal government since the first term of the Clinton Administration, the EPA rejected the rules and disapproved the Texas program on July 15, 2010. This rejection came **fifteen years** after the rules were submitted to EPA as a Texas State Implementation Plan (SIP) revision.

Under the Federal Clean Air Act, the EPA is required to act on Texas' rules within 18 months. Yet the federal government waited more than a decade – three presidential administrations – to take action and ultimately reject the TCEQ's Flexible Permits

Program rules. Despite the fact that more than a dozen years passed since the rules were first submitted, the TCEQ attempted to work with the Bush and Obama administrations and resolve the EPA administrators' objections. On June 16, 2010, the TCEQ proposed draft rules that amended the Flexible Permits Program in an effort to resolve the federal government's concerns. Despite TCEQ's efforts, the EPA summarily disapproved the Texas program just one month after the State's new proposed rules were published.

Even after the TCEQ proposed revisions to the rules to address EPA's concerns, the EPA sent letters to every flexible permit holder requiring submittal of a plan to transition to what EPA refers to as a "SIP-approved" permit.

As of May 2012, the TCEQ has "de-flexed" 65 flexible permits and 36 permit applications are pending in-house. EPA received commitments from the remaining 19 flexible permit holders to de-flex, but application submittals are still pending.

The "de-flex" process has resulted in an incredible waste of time and monetary resources for both permit holders and the TCEQ for no environmental benefit. To date, not one of the "de-flexing" permitting actions has revealed the circumvention and emissions violations that EPA claimed were being hidden by flexible permits. In addition, there have not been any reductions in emission limitations, additional controls required, or additional conditions added to the permits as a result of the process.

The TCEQ, through the State Attorney General's Office, challenged EPA's disapproval in the United States Court of Appeals for the Fifth Circuit. Briefing has been completed and oral argument was held on October 4, 2011. A decision by the court is currently pending.

Permitting of Non-Greenhouse Gas Criteria Pollutants

In the fall of 2011, EPA Region 6 posted a note on their website regarding EPA's and TCEQ's roles in issuing Prevention of Significant Deterioration (PSD) permits for major sources of greenhouse gases (GHGs). The posting stated, "EPA Region 6 is the agency responsible for issuing PSD permits for major sources of GHGs under Federal Implementation Plans (FIPs) in the states of Arkansas and Texas. The States of Texas and Arkansas still retain approval of their plans and PSD programs for pollutants that were subject to regulation before January 2, 2011, i.e., regulated NSR pollutants other than GHGs. In some cases, EPA will be issuing a permit for just GHG emissions while the state's PSD programs will issue a permit for non-GHG emissions. For projects that trigger the need for a PSD permit solely because of GHGs, **EPA will be responsible for permitting the increases on non-GHG pollutants if they are "significant" as defined at 40 CFR 52.21(b)(23)**."

This statement was posted after EPA repeatedly stated they would work with state permitting authorities (even in federal preamble language). EPA held no discussions with the TCEQ about permitting non-GHG pollutants.

Further, in the FIP, EPA only assumed authority for GHG permitting and did not assume authority for permitting of criteria air pollutants.

The TCEQ has clear authority and responsibility to permit increases of non-GHG pollutants through our authorized SIP.

The following is a quote from the September 2010 GHG PSD FIP proposal discussing its intent to limit the FIP: "...our preferred approach – for reasons of consistency – is that EPA will be responsible for acting on permit applications for only the GHG portion of the permit, that the state permitting authorities will be responsible for the non-GHG portion for the permit, and EPA will coordinate with the state permitting authority as needed in order to fully cover any non-GHG emissions [emphasis added] that, for example, are subject to BACT because they exceed the significance levels." (75 Fed Reg 53883, 53890).

EPA Delay in Approving SIP Submittals

The EPA Region 6 has not made final determinations on rules, attainment demonstrations, and other SIP revisions in a timely manner. The federal Clean Air Act requires EPA to take final action within 18 months of a state's SIP revision submittal. Failure to do so subjects EPA to the possibility of a non-discretionary duty lawsuit to take final action.

As of March 2012, all or parts of approximately 75 TCEQ SIP revisions remain pending EPA review. These 75 revisions date back to 1993. Of these 75, approximately 52 were submitted more than 18 months ago. Of these 52, approximately 15 are subject to a settlement of a non-discretionary lawsuit that requires EPA Region 6 to take final action on a staggered schedule ending on December 31, 2013.

The lack of timely action by the EPA regarding new or different requirements creates uncertainty among the regulated community. This is also true for the general public and businesses in regions of the state affected by the SIP revisions that have not received final approval by the EPA. Further, the delay may result in enforcement by EPA against the regulated community for failure to comply with the approved SIP, but where industry is complying with the new TCEQ rules.

The TCEQ may need or be required to engage in rulemaking or SIP revision project on an expedited schedule if the EPA conditionally or fully disapproves a SIP revision. Implementation of SIP-related programs is based on prior SIP submittals and may be disrupted due to EPA taking delayed negative action on the submittals.

EPA Cross-State Air Pollution Rule (CSAPR)

On July 6, 2011, the administrator of the U.S. Environmental Protection Agency (EPA) signed the Cross-State Air Pollution Rule (CSAPR), which FIPs on Texas and 26 other states to address transport requirements under the federal Clean Air Act 110(a)(2)(D)(i) for the 1997 eight-hour ozone NAAQS and the 1997 and 2006 fine particulate matter ($PM_{2.5}$) NAAQS.

The CSAPR was a replacement rule for the federal Clean Air Interstate Rule (CAIR) that was vacated in 2008 by the U. S. Court of Appeals.

The CSAPR requires power plants within the affected states to comply with ozone season nitrogen oxides (NO_X) emission budgets for states included under the rule for the 1997 eight-hour ozone NAAQS and with annual sulfur dioxide (SO_2) and NO_X emission budgets for states included under the rule for the 1997 and 2006 $PM_{2.5}$ NAAQS.

While Texas was only proposed to be included under the CSAPR for the 1997 eight-hour ozone NAAQS with ozone season NO_X emission budget requirements, the EPA finalized the rule with Texas also subject to the particulate matter programs. The EPA assigned Texas annual budgets for NO_X and SO_2 without providing the TCEQ and affected power plants within the state the opportunity to comment on them. The final rule would have required a 47 percent reduction from Texas power plant 2010 SO_2 emissions by 2012.

The federal Clean Air Act does provide that a state cannot allow emissions from sources within their state to contribute significantly to nonattainment or interference with maintenance with a NAAQS in another state. However, the states are supposed to take the primary role in meeting this transport requirement as part of the state implementation plan development process. With the CSAPR, not only did the EPA usurp the state's role in this process, the EPA did not even provide adequate notice or opportunity to the TCEQ in order to comment on the rule.

At proposal the EPA did not find that Texas power plant emissions significantly affected any air quality monitors in other states for $PM_{2.5}$. However, a "significant" Texas linkage for $PM_{2.5}$ to the Granite City, IL monitor (located approximately one half mile from a steel mill) was included at rule finalization. With no indication of any specific significant linkage at proposal, it was not possible for Texas to provide meaningful comment on the technical underpinnings of a linkage to any potential one monitor among dozens of "nonattainment" or "maintenance" receptors for $PM_{2.5}$ covered by the rule.

EPA's own modeling data, which fails to take into account local controls from the steel mill's MOU, shows that the Granite City monitor would be projected to have neither attainment nor maintenance problems for the annual $PM_{2.5}$ standard by 2014 even without the existence of CSAPR controls (i.e. 2014 base case emissions demonstrates attainment).

Despite the EPA's claims that the CSAPR will not impact electric reliability, this rule puts at risk the economic future of power generation; those dependent on affordable electricity in Texas; and places vulnerable citizens at a significant health and safety risk.

The EPA's analysis of electric reliability for the CSAPR was **not** available at proposal and includes **significant errors** regarding generation capacity within ERCOT – the largest grid operator within Texas. The EPA overestimates ERCOT's generation capacity by nearly 20,000 megawatts. The EPA estimates a base generation capacity for ERCOT power plants of around 90,400 MW. This estimate includes 100% of Texas' installed wind generation. ERCOT only plans on 8.7% of installed wind generation due to its unpredictability and unreliability. EPA's estimate of ERCOT's capacity also includes units currently retired and mothballed. More recent

information from the EPA associated with the Mercury Air Toxics Standard (MATS) rule indicates that the EPA is also underestimating future demand while overestimating future capacity.

Litigation regarding the CSAPR is ongoing. The Attorney General for the State of Texas (OAG) filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit on September 20, 2011. And the OAG also filed a motion for stay of the final rule on September 22, 2011. The rule is also being challenged by Texas electric generating utilities, including Luminant and San Miguel, and multiple other parties. Fourteen states, including Texas, filed administrative and legal challenges to the rule. The U.S. Court of Appeals stay put the rule on hold until the courts could make their final decision on the merits of the case. The courts' willingness to put the rule on hold acknowledges two key elements: 1.) That the court agrees the rule would do harm if it were in place, and 2.) That Texas may prevail once all the evidence is considered by the court. Oral arguments were heard on April 13, 2012.

In Situ Uranium Mining – Aquifer Exemptions

EPA Region 6 is reversing over 30 years of precedent by mandating modeling that is not required in EPA or state rules or indicated in EPA guidance on the subject. This new, ad hoc requirement is being applied to the state's Underground Injection Control (UIC) program. As a result, Region 6 has *sua sponte* decided that new aquifer exemptions for two in situ uranium mining projects are incomplete without computer modeling to demonstrate that the aquifer or portion thereof proposed for exemption does not currently serve as a source of drinking water.

EPA's specification that modeling should simulate groundwater conditions throughout all uranium production and groundwater restoration phases of a uranium mining operation ignores the rule criterion's focus on current conditions rather than on future events.

Such modeling is not required in EPA or state rules or indicated in EPA guidance on the subject. In fact, EPA ignores its own guidance. The TCEQ relied upon the EPA memorandum "Guidance for Review and Approval of State Underground Injection Control Programs and Revisions to Approved State Programs, GWDB Guidance #34" in preparing its program revisions to reflect the designation of the aquifer exemptions. Guidance 34 makes no reference of any modeling analysis required to demonstrate that a proposed exempted area does not currently serve as a source of drinking water.

Accordingly, the EPA did not implement any changes to aquifer exemption regulations through a rulemaking process or follow its obligations under the TCEQ-EPA Memorandum of Agreement for proper communication to TCEQ of any proposed or pending modifications to federal statutes, rules, guidelines, policy decisions, etc.

Such modeling has no precedent in any of the over 30 aquifer exemptions approved by EPA for in situ uranium mining in Texas during the 30-year history of the UIC

program in Texas. Furthermore, such modeling is not consistent with applicable case law from *Western Nebraska Resources Council v. United States Environmental Protection Agency*, 943F.2d 867.

In requiring such modeling, EPA Region 6 ignores the applicable UIC program in Texas. Thereby EPA is disregarding the state program's statutes and rules; detailed application technical review by licensed TCEQ staff; opportunity for public participation including public meetings; consideration and response to comment; and opportunity for contested case hearing and judicial review of commission decisions. **For Class III injection wells for uranium mining, the TCEQ's rules are more specific and more protective of groundwater than EPA's regulations.**

TCEQ received a letter from EPA dated May 16, 2012, persisting in their request for computer modeling. The EPA Region 6 did not deny the application, but rather refused to approve it until computer modeling is provided. However, by refusing to grant the aquifer exemption until such a time that all of EPA's "requirements" are satisfied is an effective denial.

In the TCEQ's response dated May 24, 2012, the following points are made:

- As stated in previous communications, EPA regulations, EPA guidance, and EPA precedent **do not require** groundwater modeling to consider a non-substantial UIC program revision to identify an exempted aquifer.
- Although the groundwater outside of the designated exempted aquifer is not relevant to the aquifer exemption criteria, such groundwater is protected by compliance with TCEQ injection well permits, production area authorizations, and enforcement of TCEQ's rules.
- There have been 43 Class III injection well permits issued for uranium mining in Texas. After completion of mining, restoration and reclamation activities, concurrence from the United States Nuclear Regulatory Commission is required to approve the final decommissioning, including groundwater restoration, of an *in situ* uranium mine. **There has not been one instance of documented off-site pollution of a USDW from *in situ* uranium mining activities.**
- EPA has **never** commented to TCEQ that a pending permitting action for an *in situ* uranium mining project would lead to the contamination of a USDW outside of an exempted aquifer. EPA has **never** informed TCEQ that the authorized UIC program is out of compliance with the Safe Drinking Water Act because Class III injection well operators are failing to protect USDWs or groundwater outside of exempted aquifers. And **never** has EPA notified TCEQ that EPA intended to take an enforcement action against a Class III injection well operator for failing to protect USDWs as required by TCEQ permit or rule.

- It appears that EPA may be swayed by the unsubstantiated allegations and fears of uranium mining opponents who have contacted them regarding TCEQ's program revision.
- The TCEQ remains committed to the approved UIC program and believes the permits and authorizations protect USDWs in the area as required in the Safe Drinking Water Act.

Conclusion

We will continue to consider all of our options and remain hopeful that under EPA's new leadership at Region 6, we can reach a satisfactory resolution for everyone involved.

I would also like to draw your attention to the TCEQ's Dr. Michael Honeycutt and Dr. Stephanie Shirley's Clean Air Act cost-benefit analysis study, which provides a detailed look into the critical issues with EPA's methodology. Namely, a methodology that leads to overestimated benefits of the Clean Air Act. This information is particularly disturbing given it is the flawed and inaccurate basis upon which EPA bases many of its policy judgments. Their study is attached, for ease of reference.

I thank you for the opportunity to provide written and oral testimony for this hearing, and remain available for any questions or comments you may have.

TCEQ

EPA's Benefit Cost Analysis

Susana Hildebrand, P.E., Chief Engineer
Michael Honeycutt, Ph.D.
Stephanie Shirley, Ph.D.

Texas Commission on Environmental Quality

Mission Statement:
The Texas Commission on Environmental Quality strives to protect our state's human and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

The TCEQ regularly weighs matters that affect the environment and economy. Our goal is sensible regulation that addresses real environmental risks, while being based on sound science and compliance with state and federal statutes. In every case where Texas disagrees with EPA's action, it is because EPA's action is not consistent with these principles.

Background

- March 2011 – EPA published "Benefits and Costs of the Clean Air Act from 1990 to 2020 (Second Prospective Study)"
  - Benefits ($2T) outweigh costs ($65B) by 30 to 1
    - TCEQ staff examined this analysis, focusing on:
      - The studies used
      - The assumptions made
      - The methods employed

Regulatory Impact Analyses

- President requires RIAs (Regulatory Impact Analyses) from all agencies proposing significant regulations

- RIA should help determine if the benefits of an action are likely and justify the costs or discover which of various possible alternatives would be the most cost-effective
  - (OMB circular A4, 09/2003)

- RIAs are NOT subject to peer or public review

Key legislation – Executive Orders

- EO12291 – Reagan, 1981
  - "Regulatory action shall not be undertaken unless the potential benefits to society for the regulation outweigh the potential costs to society…the alternative involving the least net cost to society shall be chosen"
- EO12866 – Clinton, 1993
  - Key change: benefits must justify the costs
- EO13563 – Obama, 2011
  - Benefits must justify the costs
  - New: equity, human dignity, fairness and distributive impacts are required to be considered
  - "Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation"

Use of $PM_{2.5}$ in RIAs

- EPA uses estimates of benefits from reducing $PM_{2.5}$ in its RIAs for rulemakings under the Clean Air Act
  - This is called "co-benefits" because a $PM_{2.5}$ reduction is expected from efforts to reduce other air pollutants
- Trend towards using $PM_{2.5}$ as primary source of benefits in most RIAs since 1997
  - Even when regulation is not intended to protect public health from exposures to ambient $PM_{2.5}$

Table 2. Summary of Degree of Reliance on $PM_{2.5}$-Related Co-Benefits in RIAs Since 1997 for Major Non-$PM_{2.5}$ Rulemakings under the CAA
(RIAs with no quantified benefits at all are not in this table. Where ranges of benefit and/or cost estimates are provided, percentages are based on upper bound of both the benefits and cost estimates. Estimates using the 7% discount rates are used in all cases.)

Year	RIAs for Rules NOT Based on Legal Authority to Regulate Ambient $PM_{2.5}$	$PM_{2.5}$ Co-Benefits Are >50% of Total	$PM_{2.5}$ Co-Benefits Are Only Benefits Quantified
1997	Ozone NAAQS (.12 1hr→.08 8hr)	x	
1997	Pulp&Paper NESHAP		
1998	NOx SIP Call & Section 126 Petition		
1999	Regional Haze Rule	x	
1999	Final Section 126 Petition Rule	x	
2004	Stationary Reciprocating Internal Combustion Engine	x	
2004	Industrial Boilers & Process Heaters NESHAP	x	x
2005	Clean Air Mercury Rule	x	
2005	Clean Air Visibility Rule/BART Guidelines	x	
2006	Stationary Compression Ignition Internal Combustion		
2007	Control of HAP from mobile sources	x	x
2008	Ozone NAAQS (.08 8hr→.075 8hr)	x	
2008	Lead (Pb) NAAQS	x	
2009	New Marine Compression-Ign Engines >30 L per	x	
2010	Reciprocating Internal Combustion Engines NESHAP	x	x
2010	EPA/NHTSA Joint Light-Duty GHG & CAFES		
2010	SO2 NAAQS (1-hr. 75 ppb)	x	~ 99.9%
2010	Existing Stationary Compression Ignition Engines	x	x
2011	Industrial, Commr. and Institutional Boilers NESHAP	x	x
2011	Indust'l, Comm'l, and Institutional Boilers & Process	x	x
2011	Comm'l & Indust'l Solid Waste Incin. Units NSPS &	x	x
2011	Control of GHG from Medium & Heavy-Duty		
2011	Ozone Reconsideration NAAQS	x	
2011	Utility Boiler MACT NESHAP (Final Rule's RIA)	x	~ 99%
2011	Mercury Cell Chlor Alkali Plant Mercury Emissions	x	
2011	Sewage Sludge Incineration Unit: NSPS & Emission	x	x
2011	Ferroalloys Production NESHAP Amendments	x	x

2009 Change in Methodology

From Smith, 2012 testimony

Key Changes in $PM_{2.5}$ Methodology

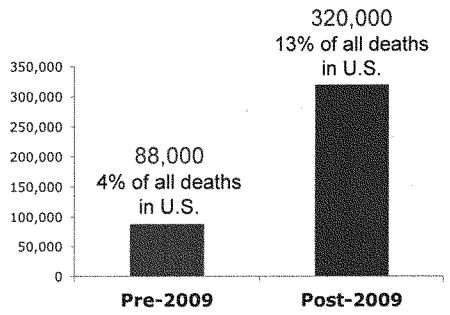
- The Benefits and Costs of the Clean Air Act from 1990 to 2020 (March 2011)
  1. A no-threshold model for $PM_{2.5}$ that calculates incremental benefits down to the lowest modeled air quality levels
  2. Risks attributed to very low (background) levels of ambient $PM_{2.5}$
  3. Assumption of causal relationship between $PM_{2.5}$ and mortality
  4. A Value of Statistical Life (VSL)

Result of Key Changes in $PM_{2.5}$ Methodology

Change in deaths attributable to $PM_{2.5}$

Increased estimates of benefits

Number of Deaths due to $PM_{2.5}$ in 2005

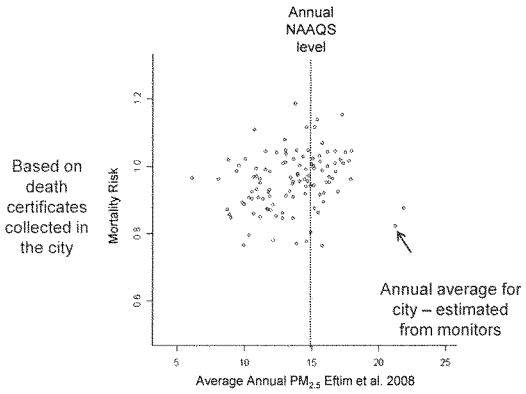


Source: EPA 2010 Quantitative Health Risk Assessment for $PM_{2.5}$ Table G-1

Despite improvement in air quality since the CAAA

1. No Threshold Model

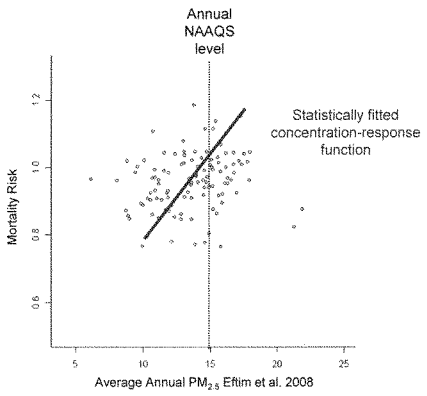
- A no-threshold model for $PM_{2.5}$ that calculates incremental benefits down to the lowest modeled air quality levels



Adapted from Smith 2011

1. No Threshold Model

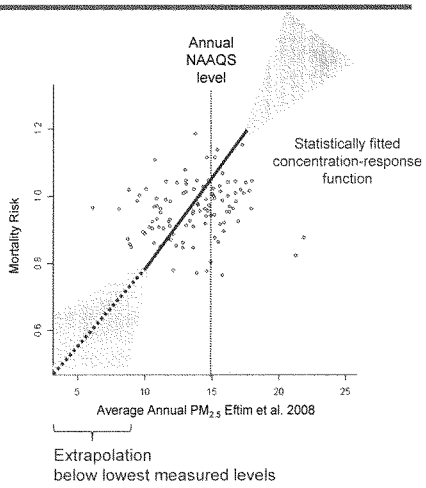
- A no-threshold model for $PM_{2.5}$ that calculates incremental benefits down to the lowest modeled air quality levels



Adapted from
Smith 2011

1. No Threshold Model

- A no-threshold model for $PM_{2.5}$ that calculates incremental benefits down to the lowest modeled air quality levels



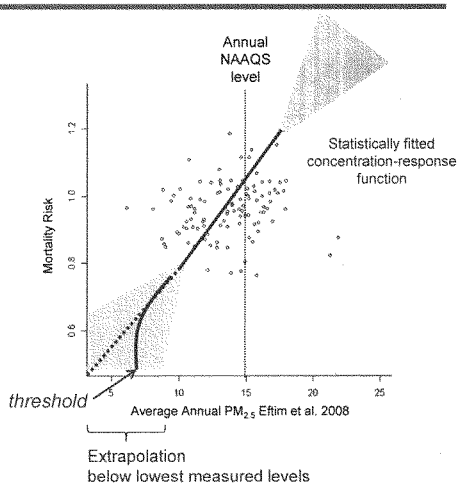
Adapted from
Smith 2011

1. No Threshold Model

- A no-threshold model for $PM_{2.5}$ that calculates incremental benefits down to the lowest modeled air quality levels

1. Question: what is the shape of the curve in the low-dose range?

2. Question: is there significant risk associated with ambient $PM_{2.5}$ levels?



Adapted from Smith 2011

Clinical Exposure Studies Conducted by EPA

January 2010 – June 2011

41 Volunteers

Dose:35 – 750 ug/m^3

Results:

1 individual: elevated heart rate

1 individual: irregular heart beat*

39 individuals: no clinical effects

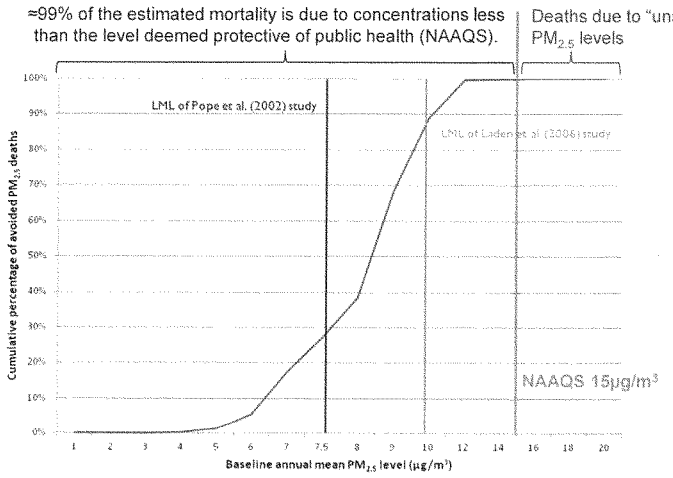
** Case Report: Supraventricular Arrhythmia after Exposure to Concentrated Ambient Air Pollution Particles. Ghio et al. EHP. Feb. 2012. 120:275-277*

FOIA # HQ-FOI-02235-11

1/5/2010	OMCD19	11:02	13:02	309.27	No clinical effects requiring follow-up observed
1/6/2010	KCM112	9:34	11:34	153.98	No clinical effects requiring follow-up observed
1/9/2010	OMCD25	10:52	12:52	442.49	No clinical effects requiring follow-up observed
1/9/2010	OMCD23	10:45	11:08	769.83	No clinical effects requiring follow-up observed
1/13/2010	OMCD24	10:48	12:40	147.42	No clinical effects requiring follow-up observed
4/13/2010	OMCD25	10:43	12:43	431.06	No clinical effects requiring follow-up observed
4/20/2010	OMCD26	11:18	13:19	336.56	No clinical effects requiring follow-up observed
4/27/2010	OMCD27	11:00	13:00	157.28	No clinical effects requiring follow-up observed
4/28/2010	KCM111	9:33	11:33	154.36	No clinical effects requiring follow-up observed
5/4/2010	OMCD28	10:54	12:54	328.78	No clinical effects requiring follow-up observed
5/5/2010	KCM113	9:26	11:26	578.95	No clinical effects requiring follow-up observed
5/11/2010	OMCD23	10:51	12:51	347.77	No clinical effects requiring follow-up observed
6/8/2010	OMCD30	10:38	12:48	257.12	No clinical effects requiring follow-up observed
6/15/2010	OMCD31	11:28	13:28	468.06	No clinical effects requiring follow-up observed
6/29/2010	OMCD33	11:04	13:04	311.36	No clinical effects requiring follow-up observed
7/13/2010	OMCD34	10:49	12:49	177.02	No clinical effects requiring follow-up observed
7/15/2010	XCE224	11:10	13:10	137.19	No clinical effects requiring follow-up observed
8/20/2010	OMCD35	11:00	13:00	411.98	No clinical effects requiring follow-up observed
8/12/2010	XCE225	10:59	12:59	157.63	No clinical effects requiring follow-up observed
8/23/2010	KCM114	9:55	11:55	232.93	No clinical effects requiring follow-up observed
9/9/2010	XCE226	10:55	12:55	97.16	No clinical effects requiring follow-up observed
9/23/2010	XCE228	11:05	13:05	174.83	No clinical effects requiring follow-up observed
10/5/2010	KCM115	9:31	11:31	181.90	No clinical effects requiring follow-up observed
10/7/2010	XCE227	11:21	12:20	111.98	Removed from chamber due to new onset of atrial fibrillation. Individual reverted to normal sinus rhythm approximately two hours later. Individual was admitted to the hospital overnight for observation and telemetry. Detailed in Ghio et al., 2012 Case Report. Environ Health Perspect doi:10.1289/ehp.1103877
11/18/2010	XCE229	11:14	13:14	59.08	No clinical effects requiring follow-up observed
12/2/2010	XCE231	10:45	12:55	35.80	No clinical effects requiring follow-up observed
1/6/2011	XCE232	11:05	13:05	43.65	No clinical effects requiring follow-up observed
1/24/2011	XCE237	10:47	12:47	250.63	No clinical effects requiring follow-up observed
1/31/2011	XCE234	11:03	13:03	90.95	No clinical effects requiring follow-up observed
2/3/2011	XCE236	11:12	13:12	57.91	No clinical effects requiring follow-up observed
2/10/2011	XCE235	11:12	11:35	66.24	Removed from chamber due to a short episode of an elevated heart rate during exposure. The individual denied any symptoms. This individual was provided with copies of the ECG and holter recording and referred to MD.
2/24/2011	XCE238	10:57	12:57	103.51	No clinical effects requiring follow-up observed
3/10/2011	XCE239	10:52	12:51	80.96	No clinical effects requiring follow-up observed
4/14/2011	XCE257	10:48	12:48	73.24	No clinical effects requiring follow-up observed
4/18/2011	XCE242	11:09	13:09	72.89	No clinical effects requiring follow-up observed
4/25/2011	XCE240	11:05	13:05	45.54	No clinical effects requiring follow-up observed
5/1/2011	XCE244	11:13	13:13	85.33	No clinical effects requiring follow-up observed
5/16/2011	XCE243	11:00	13:00	142.50	No clinical effects requiring follow-up observed
5/23/2011	XCE245	10:57	12:57	266.92	No clinical effects requiring follow-up observed
6/1/2011	XCE247	11:01	13:00	179.58	No clinical effects requiring follow-up observed
6/6/2011	XCE246	10:55	12:55	308.52	No clinical effects requiring follow-up observed

* Note - Clinical Effects is defined as requiring medical follow-up or referral to physician

2. Risk Attributed to Ambient PM2.5

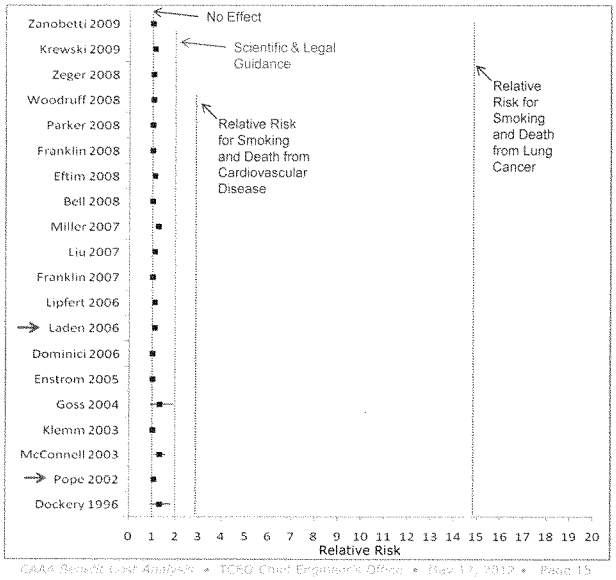


Of the total PM-related deaths avoided:

73% occur among population exposed to PM levels at or above the LML of the Pope et al. study.

11% occur among population exposed to PM levels at or above the LML of the Laden et al. study.

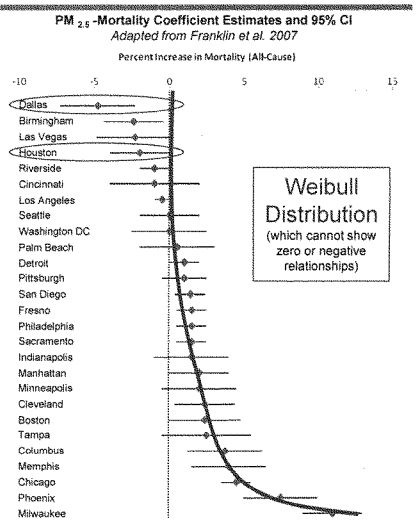
3. Assumption of Causality



3. Assumption of Causality

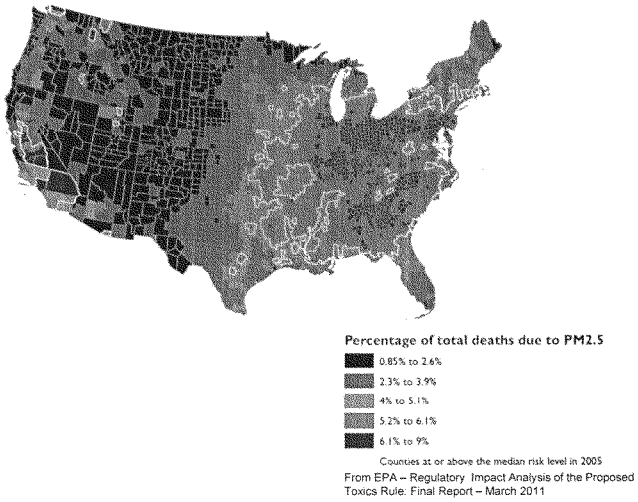
- The epidemiology studies cannot show causality
- The analysis "assumes a causal relationship between $PM_{2.5}$ exposure and premature mortality…if the $PM_{2.5}$/mortality relationship is not causal, it would lead to a significant overestimation of net benefits"

-EPA, The Benefits and Costs of the Clean Air Act from 1990 to 2020, March 2011



Extrapolation of Mortality Estimates

Figure C-2. Distribution of $PM_{2.5}$ Mortality Risk in 2005



From EPA – Regulatory Impact Analysis of the Proposed Toxics Rule: Final Report – March 2011

4. Value of Statistical Life
Definition

- A Value of Statistical Life (VSL) = value of risk reduction
  - A "statistical life" has traditionally referred to the aggregation of small risk reductions across many individuals until that aggregate reflects a total of one statistical life
  - The VSL has been a shorthand way of referring to the monetary value or tradeoff between income and mortality risk reduction, i.e. the willingness to pay for small risk reductions across large numbers of people
  - It has led to confusion because it has been interpreted as referring to the loss of identified lives

If risk was reduced
by 1 in 1,000,000
for 1 year
in a population of 200 million

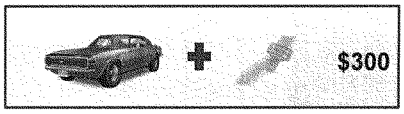
savings of 200 **statistical** lives = value of risk reduction

savings of 200 **actual** lives

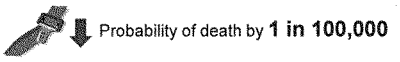
Deriving Value of Statistical Life

Willingness to Pay – Road Hazard Studies

- Example:
  - Cars with seatbelts cost $300 more than cars without seatbelts



  - Buying a car with that option reduces the probability of death by 1 in 100,000



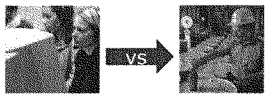
  - If people are willing to pay for this option, we can infer that the person is placing a valuation on his/her life of at least $300 x 100,000 = 30,000,000 ($30 million)

$300
x 100,000
= $30 million

Deriving Value of Statistical Life

Income vs. Risk – Occupational Studies

- Example:
  - A job carries a higher risk of injury, but pays $ 500 more per year



$ 500

  - The more dangerous job carries an increased risk of injury by 1 in 10,000

Probability of injury by **1 in 10,000**

  - If people are willing to pay for this option, we can infer that the individuals are placing a valuation on their lives of at least $500 x 10,000 = 5,000,000 ($5 million)

$ 500
x 10,000
= $5 million

Interpreting VSL in the Media

"When these new [EGU MACT] standards are finalized, they **will assist in preventing** 11,000 heart attacks, **17,000 premature deaths**, 120,000 cases of childhood asthma symptoms and approximately 11,000 fewer cases of acute bronchitis among children each year. Hospital visits will be reduced and nearly 850,000 fewer days of work will be missed due to illness."

- Lisa Jackson, EPA Administrator, 2011

This was interpreted as:

"EPA's proposed mercury and air toxics standards ... **are projected to save as many as 17,000 American lives** ...

- John D. Walke, Natural Resources Defense Council, 2011

"These new standards mark a huge step forward in clean air protections and **will be responsible for saving thousands of lives** each year."

- Albert A. Rizzo, MD, National Volunteer Chair of the American Lung Association

"The new EPA mercury standards **will save countless lives** and improve the quality of life for millions."

- New York Mayor Michael Bloomberg

Appropriate Use of Value of Statistical Life

The Benefits and Costs of the Clean Air Act from 1990 to 2020

EPA VSL:$8,900,000

- Lives Saved vs. Life-Years Added
  - Deaths "prevented or avoided"
  - Gains in life expectancy

TABLE 5-8. LIFE YEARS GAINED AND LIFE EXPECTANCY GAIN ESTIMATES FROM THE POPULATION SIMULATION MODEL

AGE COHORT		LIFE-YEARS GAINED IN SPECIFIC YEARS (ANNUAL)		CUMULATIVE LIFE YEARS GAINED THROUGH TARGET YEAR		LIFE EXPECTANCY GAINS (YEARS)		
START AGE	END AGE	2020	2040	2020	2040	2010	2020	2040
30	39	17,000	18,000	260,000	620,000	0.65	0.87	0.91
40	49	60,000	71,000	910,000	2,300,000	0.63	0.84	0.88
50	59	150,000	180,000	2,000,000	5,400,000	0.59	0.79	0.84
60	69	330,000	380,000	3,500,000	11,000,000	0.53	0.71	0.76
70	79	470,000	840,000	5,000,000	20,000,000	0.44	0.59	0.64
80	89	470,000	1,200,000	6,000,000	23,000,000	0.32	0.43	0.48
90	99	320,000	800,000	3,600,000	14,000,000	0.19	0.25	0.27
100+		60,000	200,000	490,000	3,100,000	0	0	0
Total		1,900,000	3,800,000	22,000,000	80,000,000			

Note: Column entries do not add to totals due to rounding. Life expectancy results are incremental period conditional life expectancy gains at the start age of the cohort.

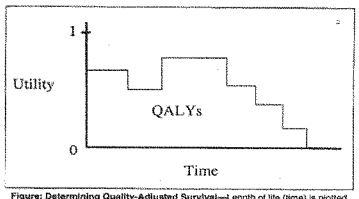


Figure: Determining Quality-Adjusted Survival—Length of life (time) is plotted against quality of life (utility). The area under the curve represents quality-adjusted survival measured in quality-adjusted life years (QALYs).

From Weeks 1995

- The median age of people who gain extra months of life from cleaner air is close to 80 years
- Adjustment of VSL for quality of life:
  - EPA VSL of $8,900,000 appropriate for healthy young adult (≈25)
  - 6:1 ratio for 25 vs. 80 year old

Clean Air Act - Benefits and Costs

reduced number of deaths in 2020 * value per statistical life saved
= 230,000 fewer deaths * $8,900,000 per life saved
≈ $2 trillion
Benefit/Cost = $2 trillion/$0.065 trillion* ≈ 30

life-years gained in 2020 * value per statistical life-year gained
=1,900,000 life-years gained * $150,000/life-year gained
≈ $0.3 trillion
Benefit/Cost = $0.3 trillion/$0.065 trillion* ≈ 5

Adjusted estimate of benefit:
$19 billion

Benefit/Cost = $0.019 trillion/$0.065 trillion* ≈ 0.3

Mercury & Air Toxics Standard

	Benefits from HAPs (billions)	"Co-Benefits" from non-HAPs (billions)
Mercury	$ 0.004-0.006	$ 1-2
Acid Gasses	$ 0	$ 32-87
Non-Hg Metals	$ 0	$ 1-2
Total	**≤$ 0.006**	**$ 33-90**

- MATS is estimated to prevent 0.00209 IQ point loss per child (starting immediately)
- Each child will gain 0.0956 school days over their lifetime
- 0.00209 IQ points x 244,468 children = 511 IQ points per year
- Assuming a net monetary loss per decrease in one IQ point of between ~$8,000 and ~$12,000 (in terms of foregone future earnings)
- Benefit = $4.2M to $6.2M

Table adapted from testimony by Anne E. Smith 2/2010 to Subcommittee on Energy and Power

Oil & Gas NSPS and NESHAPS

	Oil and Natural Gas NSPS (millions)	Oil and Natural Gas NESHAP Amendments (millions)
Benefits	NA	NA
Costs	- $15	$3.5
Non-monetized benefits	11,000 tons of HAP5 190,000 tons of VOC 1.0 million tons of methane Health effects of HAP exposure Health effects of $PM_{2.5}$ and ozone exposure Visibility impairment Vegetation effects Climate effects	670 tons of HAP 1,200 tons of VOC 420 tons of methane Health effects of HAP exposure Health effects of $PM_{2.5}$ and ozone exposure Visibility impairment Vegetation effects Climate effects

*"...**quantification of those benefits cannot be accomplished for this rule.** This is not to imply that there are no benefits of the rules; rather, it is a reflection of the difficulties in modeling the direct and indirect impacts of the reductions in emissions for this industrial sector with the data currently available."*
April 2012 RIA

PM Co-Benefits in RIAs

	$PM_{2.5}$ NAAQS	Utility Boiler MACT	Mercury Air Toxics Standard	Sewage Sludge Incineration Units	Ferroalloy NESHAP	Total Costs millions ($2006)
Estimated Statistical Deaths	15,000	11,900	2,650	25	14	
Cost	6,400	10,600	9,329	17	4	26,350

- Double counting benefits: same statistical lives counted in multiple rules
- Different costs: unique to each rule


TCEQ

Contact Information

Susana M. Hildebrand, P.E.
Chief Engineer
susana.hildebrand@tceq.texas.gov
(512) 239-4696

Michael Honeycutt, Ph.D.
Division Director, Toxicology
michael.honeycutt@tceq.texas.gov
(512) 239-1793

Health Effects of Poverty and Unemployment

- Poverty and unemployment have been recognized as risk factors for morbidity and mortality since the 1800's (Virchow, 1848)
  - As of March 2012, there are 4,850 publications on this topic

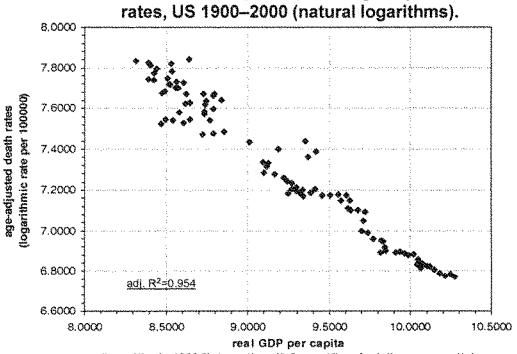
Unemployment and All-Cause Mortality

Meta-analyses stratified by gender and age [a]

Gender	Mean Age	HR (95% CI)
	Less than 40	1.73[b] (1.41, 2.11)
Women	40 to 49.9	1.34[b] (1.15, 1.56)
	50 to 65	0.94 (0.80, 1.11)
	Less than 40	1.95[b] (1.69, 2.26)
Men	40 to 49.9	1.86[b] (1.63, 2.12)
	50 to 65	1.17[c] (1.00, 1.36)

Roelfs et al. Soc Sci Med 2011; 72:840-54

Relation of real GDP per capita to age-adjusted death rates, US 1900–2000 (natural logarithms).

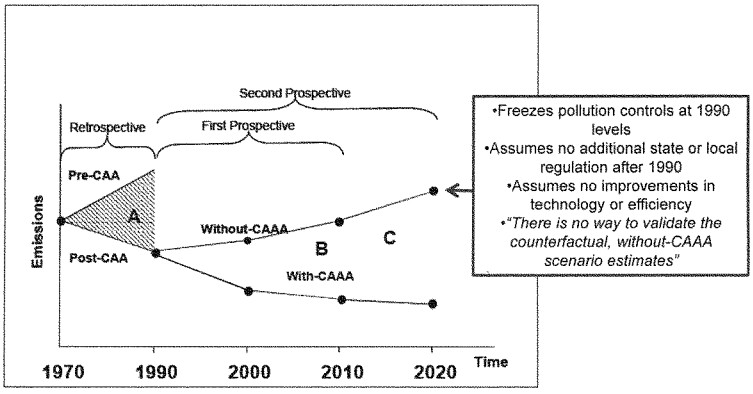


Brenner M H Int. J. Epidemiol. 2005;34:1214-1221

With CAAA vs. Without CAAA

The Benefits and Costs of the Clean Air Act from 1990 to 2020

FIGURE 1-1. CLEAN AIR ACT SECTION 812 SCENARIOS: CONCEPTUAL SCHEMATIC



Oil & Gas NESHAPS

Table 4-7 Climate Methane Benefits Using 'GWP' Approach

	Total Benefits based on 100 year GWP adjustment[2] (millions 2008$)	
SCC Value for 2015 emission reductions ($/ton CO_2 in 2008 dollars)[1]	Final NSPS	Final NESHAP Amendments
$6 (mean 5% discount rate)	$100	$0.05
$25 (mean 3% discount rate)	$440	$0.20
$40 (mean 2.5% discount rate)	$700	$0.32
$76 (95th percentile at 3% discount rate)	$1,300	$0.60
Methane Emission Reductions[3] (MMT CO_2-e)	17.6	0.008

April 18, 2012 Press Conference

"Today's rules would yield significant reductions in methane, a potent greenhouse gas. EPA's Regulatory Impact Analysis for the rule estimates the value of the climate co-benefits that would result from this reduction at $440 million annually by 2015."
-Gina McCarthy

Reported monetized benefit: $0

Note: benefits calculated at 3%, but costs at 7%

Costs of the Clean Air Act and Amendments

Year	RIAs for Rules Not Targeting Ambient PM 2.5	PM Co-Benefits are >50% of Total	PM Co-Benefits Are Only Benefits Quantified	Cost ($ Billion)*
1997	Ozone NAAQS (.12 1hr=>.08 8hr)	x		9.60
1997	Pulp&Paper NESHAP			6.48
1998	NOx SIP Call & Section 126 Petitions			1.66
1999	Regional Haze Rule	x		1.74
1999	Final Section 126 Petition Rule	x		1.15
2004	Stationary Reciprocating Internal Combustion Engin NESHAP	x		0.25
2004	Industrial Boilers & Process Heaters NESHAP	x	x	0.86
2005	Clean Air Mercury Rule	x		0.90
2005	Clean Air Visibility Rule/BART Guidelines	x		1.50
2006	Stationary Compression Ignition Internal Combustion Engine NSPS			0.06
2007	Control of HAP from mobile sources	x	x	0.36
2008	Ozone NAAQS (.08 8hr =>.075 8hr)	x		8.20*
2008	Lead (Pb) NAAQS	x		3.20
2009	New Marine Compress'n-Ign Engines >30 L per Cylinder	x		1.90
2010	Reciprocating Internal Combustion Engines NESHAP - Comp. Ignit.	x	x	0.37
2010	EPA/NHTSA Joint Light-Duty GHG & CAFES			15.60
2010	SO2 NAAQS (1-hr, 75 ppb)	x	>99.9%	1.50
2010	Existing Stationary Compression Ignition Engines NESHAP	x	x	0.25
2011	Industrial, Comm, and Institutional Boilers NESHAP	x	x	0.49
2011	Indus'l, Comm'l, and Institutional Boilers & Process Heaters NESHAP	x	x	2.90
2011	Comm'l & Indus'l Solid Waste Incin. Units NSPS & Emission G'lines	x	x	0.28
2011	Control of GHG from Medium & Heavy-Duty Vehicles			2.00*
2011	Ozone Reconsideration NAAQS	x		8.20*
2011	Utility Boiler MACT NESHAP (Final Rule's RIA)	x	≥99%	9.60
2011	Mercury Cell Chlor Alkali Plant Mercury Emissions NESHAP	x		0.00
2011	Sewage Sludge Incineration Units NSPS & Emission Guidelines	x	x	0.02
2011	Ferroalloys Production NESHAP Amendments	x	x	0.004
		Total:		60.67

- Cross State Air Pollution Rule
  - EPA estimated cost:$800 million annually
  - Independent analysis: $120 billion by 2015
- Boiler MACT
  - EPA estimated cost:$2.6 billion annually
  - Independent analysis:$14.5 billion

+ MATS – 9.3 **Partial Total: 69.97**

* ($2006)

Business Impact

FIGURE 8-6. PERCENT CHANGE IN INDUSTRY OUTPUT IN 2020: LABOR FORCE-ADJUSTED CASE

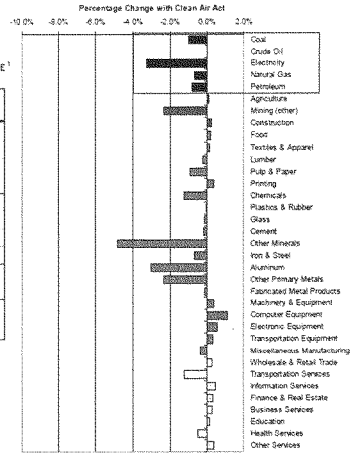


TABLE 8-8.
SUMMARY OF ANNUAL MACROECONOMIC IMPACTS: LABOR FORCE-ADJUSTED CASE[1]

VARIABLE	MODEL RUN	2010	2015	2020
GDP	With Clean Air Act ($ billion)	$15,027	$17,338	$20,202
	Without Clean Air Act ($ billion)	$15,059	$17,350	$20,197
	Change ($ billion)	-$32	-$12	$5
	% change	-0.21%	-0.07%	0.02%
Consumption	With Clean Air Act ($ billion)	$10,969	$12,699	$14,881
	Without Clean Air Act ($ billion)	$10,972	$12,696	$14,876
	Change ($ billion)	-$3	$3	$5
	% change	-0.03%	0.02%	0.03%
Hickstan EV (annual)	Change ($ billion)	$11	$22	$29
	% change	0.08%	0.13%	0.15%

Notes:
1. Results are expressed in year 2006 dollars.

Adjusted Benefits Estimate

Tony Cox, 2011:

($1.8 trillion initial estimate)
x (1/6 reduction factor for VSL if age or VSLY is considered)
x (0.5 probability that a true association exists)
x (0.5 probability that a true association is causal, given that one exists)
x (0.5 probability that ambient concentrations are above any thresholds or nadirs in the C-R function, given that a true causal C-R relation exists)
x (0.5 expected reduction factor in C-R coefficient by 2020 due to improved medication and prevention of disease-related mortalities)

= (1.8 trillion)*(1/6)*(0.5)*(0.5)*(0.5)*(0.5) = $19 billion

Mr. WHITFIELD. Thank you.
Mr. Sullivan, you are recognized for 5 minutes.

STATEMENT OF ROBERT J. SULLIVAN, JR.

Mr. SULLIVAN. Thank you, Chairman Whitfield and Ranking Member Rush and other members of the subcommittee. I very much appreciate this opportunity.

I would also like to thank my Congressman, Vice Chairman Sullivan, for his leadership on crude oil and natural gas issues, and for the record, although I share his last name, we are not related, a fact for which I am sure Congressman Sullivan is continually grateful.

I am Chairman of the Oklahoma Independent Petroleum Association and the Owner of Sullivan and Company LLC, a 54-year-old family-owned independent producer of crude oil and natural gas. I have 25 employees, roughly half in the field and half in the office.

Like my peer OIPA members, Sullivan and Company explores for new domestic oil and natural gas reserves using modern finding, drilling and production techniques. In addition to our work on private lands, Sullivan and Company operates extensively on Indian lands.

I have submitted my written testimony for the record and will take only a few minutes to address a few key points. First, the personal agendas of EPA officials impact EPA priorities and practices and result in overzealous enforcement actions. Wrongful EPA actions in the Parker County, Texas, Pavilion, Wyoming, and Dimock, Pennsylvania, instances show the limits of Federal credibility when it comes to regulating oil and gas operations. We are troubled by the enforcement philosophy of EPA as expressed by Mr. Armendariz, but we are not surprised. Mr. Armendariz is a highly motivated environmental activist who pursued his anti-fossil fuel agenda through a powerful EPA post. He used the bogeyman of hydraulic fracturing, a safe and proven technology, to achieve his goals.

With no scientific basis to fault hydraulic fracturing, activists and administration officials have become fear mongers. Their strategy is to create anxiety over oil and natural gas development, criticize State groundwater and drinking water protections as insufficient, federalize oil and gas regulations, and use that process to slow development by increasing the cost of regulatory compliance.

Federalizing exploration and production rules will kill jobs, curb domestic energy production and harm America. The Federal Government has neither the expertise nor the objectivity to fulfill such a charge. The regulation of oil and gas activities must reside with the States. Every State is geologically distinct. There is no one-size-fits-all solution or protection program.

Second, the victims of corrupted EPA practices and science are policymakers of both major parties. Consumers and small oil and natural gas businesses like mine, nationwide that is 18,000 companies, averaging about a dozen employees each and operating in 32 States. We independent producers have no refining or gasoline station operations. We sell our commodities, which are crude oil and natural gas, at whatever price the global market says they are worth. We are not Big Oil.

But together, independent producers drill 95 percent of all the wells in the United States and account for 68 percent of the total U.S. production. That is made up of roughly 82 percent of U.S. natural gas production and more than 54 percent of domestic oil production. On shore in America, we independents are responsible for over 3 percent of the total U.S. workforce, more than 4 million American jobs, more than $579 billion in total economic activity, and 4 percent of the U.S. GDP. And we pay a lot of taxes, royalties, rents to Federal, State and local governments.

In 2010, independent producers generated $131 billion for Federal and State coffers. For every $1 million upstream capital expenditures by independent producers, that results in $5.1 million in overall contribution to the U.S. GDP and six direct jobs and 33 total upstream jobs, so there is 5:1 leverage there.

For each of the past 4 years, the President has asked Congress to prevent small producers like me from deducting normal business expenses at tax time. He and his executive agencies have also rejected the Keystone XL pipeline, which independent producers need to move oil more efficiently to market from Montana and North Dakota. They have opted for expanded New Source Performance and Emissions Standards and mandatory greenhouse gas reporting rules that will cost our industry hundreds of millions of dollars. They have proposed a set of duplicative and unnecessary Federal rules for hydraulic fracturing on public and Indian lands that will delay permits and reduce royalty payments to tribes and Federal Government. They have pressed for landmark legislation to raise the price of all fossil fuels in order to help create a market for alternative energy sources that do not exist in commercial volumes or are not economically feasible today.

Finally, recent abuses by the EPA clearly show that Congress must exercise more oversight of the agency. Regional EPA Administrators have too much power and at the very least should be subject to Senate confirmation.

I think you for the privilege of testifying, Mr. Chairman.

[The prepared statement of Mr. Sullivan follows:]

Testimony of Robert J. Sullivan, Jr.
Chairman, Oklahoma Independent Petroleum Association

U.S. House of Representatives
Energy & Commerce Committee
Subcommittee on Energy & Power

Wednesday, June 6, 2012

Chairman Whitfield, Ranking Member Rush, members of the Subcommittee, I appreciate the opportunity to testify today.

I would like to thank my Congressman, Vice Chairman Sullivan, for his leadership to increase the domestic production of crude oil and natural gas. As I hope my testimony reveals, these fossil fuels are critical not just to Oklahoma, but also to the nation. For the record, although he and I share a last name and come from Tulsa we are not, to the best of our knowledge, related.

I serve as Chairman of the Oklahoma Independent Petroleum Association and am the owner of Sullivan and Company, LLC, a 54-year-old independent producer of crude oil and natural gas. I have 25 employees – 13 in our Tulsa office and 12 in the field.

Like my peer OIPA members, Sullivan and Company explores for new, domestic oil and natural gas reserves using modern finding, drilling, and production techniques. In addition to our work on private lands, Sullivan and Company operates extensively on Indian lands.

Today's hearing is critical to understanding how the personal agendas of senior EPA officials manifest themselves in overzealous enforcement actions as well as the limits of federal credibility when it comes to regulating exploration and production operations.

There are roughly 18,000 independent producers like me operating in 32 states. Although some are larger and well known, the average independent producer employs 11 full-time and three part-time employees. He or she has been in business for 26 years on average.[1]

Together, we drill 95 percent of all U.S. wells and account for 68 percent of total U.S. production – roughly 82 percent of U.S. natural gas production and more than 54 percent of domestic oil production;

Onshore here in America, independents are responsible for:

- over 3 percent of the total U.S. workforce;
- more than 4 million American jobs;
- more than $579 billion in total economic activity;
- 4 percent of U.S. GDP;[2]

In 2010, independent producers' employees paid $30.7 billion in income, sales, and excise taxes. Our combined total federal, state, and local taxes, royalties and rents were $69.1 billion. Our ecosystem of direct, indirect and induced jobs generated $131 billion for federal and state coffers.[3]

Every $1 million of upstream capital expenditure by independent producers results in $1.1 million in total taxes, $5.1 million in overall contribution to U.S. GDP, six direct jobs, and 33 total upstream jobs.[4]

Like the subcommittee, OIPA and independent producers across the nation are troubled by the enforcement philosophy of EPA as expressed by former EPA Region 6 Administrator Al Armendariz in a recently revealed 2010 video:

"But as I said, oil and gas is an enforcement priority, it's one of seven, so we are going to spend a fair amount of time looking at oil and gas production. And I gave, I was in a meeting once and I gave an analogy to my staff about my philosophy of enforcement, and I think it was probably a little crude and maybe not appropriate for the meeting but I'll go ahead and tell you what I said. It was kind of like how the Romans used to conquer little villages in the Mediterranean. They'd go into a little Turkish town somewhere, they'd find the first five guys they saw and they would crucify them. And then you know that town was really easy to manage for the next few years. And so you make examples out of people who are in this case not compliant with the law. Find

people who are not compliant with the law, and you hit them as hard as you can and you make examples out of them, and there is a deterrent effect there. And, companies that are smart see that, they don't want to play that game, and they decide at that point that it's time to clean up. And, that won't happen unless you have somebody out there making examples of people. So you go out, you look at an industry, you find people violating the law, you go aggressively after them. And we do have some pretty effective enforcement tools. Compliance can get very high, very, very quickly. That's what these companies respond to is both their public image but also financial pressure. So you put some financial pressure on a company, you get other people in that industry to clean up very quickly. So, that's our general philosophy." – EPA Region 6 Administrator Al Armendariz, 2010

While surprised that Mr. Armendariz was so forthcoming, OIPA is not surprised by what he revealed about his approach to managing the Region 6 office, nor about EPA's culture and philosophy.

In June 2010, OIPA hosted Mr. Armendariz at its annual meeting in Dallas, Texas. He had recently assumed his position at Region 6. OIPA members wanted to learn more about the man who would have such authority over their companies' bottom lines.

While Mr. Armendariz did not use the inflammatory rhetoric with us that ultimately resulted in his resignation, he sent a clear and direct signal to us that he was the new sheriff in town and that he intended to initiate an attack on oil and natural gas producers within Region 6. Our general impression of Mr. Armendariz was of a highly motivated and committed environmental activist who opposed fossil fuels.

We could not have known at that time the arc of Mr. Armendariz's career, nor the role EPA's wrongful Parker County, Texas, enforcement action would play in environmental extremists' public campaign to demonize safe and proven technologies that are helping break America's dependence on overseas oil.

It is impossible to discuss these issues without addressing hydraulic fracturing – the current bogeyman used by environmental activists to scare ordinary citizens, drive professional

fundraising appeals, and motivate environmental extremists and powerful voting blocs that simply oppose fossil fuels.

Hydraulic fracturing is a technique used to provide a pathway for natural gas and oil trapped inside a rock into a producing well so that they can be brought to the surface. The earliest hydraulic fracturing jobs occurred in the late 1940s in Oklahoma and Kansas. The technique has been continuously used and improved since that time. Generally, a solution that is 99.5 percent water and sand is pumped under extreme pressure into the rock. The pressure creates tiny fractures in the rock. The fluid is then pulled out of the rock while the sand remains behind to prop open the fractures and allow the oil and natural gas to flow into the wellbore.

More than 100,000 Oklahoma wells have been hydraulically fractured over the past 60 years without a single documented instance of contamination to ground water or drinking water.[5]

This is because state ground water regulations were developed long before hydraulic fracturing began and have proven more than sufficient in regulating the practice. Oklahoma's first commercial oil well was drilled in 1897, 10 years before statehood. The Oklahoma Corporation Commission was given responsibility for regulation of oil and gas production in Oklahoma in 1914. The Commission has exclusive state jurisdiction over all oil and gas industry activity in Oklahoma, including oversight and enforcement of rules aimed at pollution prevention and abatement and protecting the state's water supplies.[6]

Such state regulations established well construction standards including protective steel casing and cementing requirements. They were designed to protect ground water from contamination by oil and its produced water. These regulations have effectively prevented contamination of drinking water and ground water in more than a million instances where hydraulic fracturing has been used.[7]

Thanks to hydraulic fracturing and technological breakthroughs in horizontal drilling the United States now imports less than 49 percent of its oil, down from 60 percent a few short years ago.

This does not sit well with fossil fuel opponents. With no scientific basis to fault hydraulic fracturing, environmental extremists have become fear mongers. Their strategy is to create anxiety over oil and natural gas development, criticize state ground water and drinking water protections as insufficient, demand that the regulatory process be federalized, and then use that process to slow development by increasing the costs of regulatory compliance in terms of both employee hours committed to the paperwork burden and actual dollars.

For example, compliance software costs associated with the greenhouse gas reporting requirements under EPA's proposed New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) exceed $227,000 plus $54,000 in annual maintenance and updates. That's just software expenses for one company. The total cost of monitoring equipment, capture devices, and reporting measures to meet EPA greenhouse gas reporting and reduction efforts will run into the hundreds of millions of dollars annually.

As another example of federal regulatory overreach, you may or may not be familiar with the American Burying Beetle, which is listed as an endangered species. The Department of the Interior has determined the beetle to be active during certain parts of the year in Osage County, Okla., where I have operations to produce minerals owned by the Osage Tribe. To protect the beetle I must hire consultants, who must put out survey traps containing carrion, file additional paperwork with the U.S. Fish and Wildlife Service (USFWS) and slow drilling operations during the beetles' active period. Slowing operations to protect the beetle means slowing royalty payments to the Osage Tribe. This endangered species issue means my operations are regulated

by two separate competing entities within the Department of the Interior – the Bureau of Indian Affairs to protect the tribe and USFWS to protect the beetle – plus OSHA, plus EPA.

In the case of Parker County, Texas, EPA Region 6 decided that state and local officials had not taken sufficient action to investigate claims of contaminated drinking water. Without scientific basis for doing so, the EPA decided to blame reports of contamination on hydraulic fracturing, notified opponents of hydraulic fracturing that it intended to make news, ordered independent producer Range Resources to provide clean drinking water to local residents, engaged in a media campaign to frighten residents about the danger of a fire or explosion, imposed heavy financial penalties on Range Resources, and then promoted its ability to assess heavy penalties through news releases.[8]

Mr. Armendariz, it seems, was intently following his own playbook.

Earlier this year, however, a judge found that one of the local residents alleging contamination had worked with environmental activists to deceive public officials and the community about the threat. In March, EPA quietly withdrew its administrative order that alleged Range Resources had polluted the water and dropped its lawsuit against Range Resources.

In hindsight, it should be noted that the Environmental Defense Fund had contracted with Mr. Armendariz in 2007 to produce a study on shale-related air emissions in Dallas-Fort Worth that challenged the prior research of state and federal regulators.[9] Published in January 2009, Mr. Armendariz's conclusions were subsequently challenged by the Barnett Shale Energy Education Council due to his "inaccurate and flawed interpretation of the facts."[10] Additionally, Mr. Armendariz served as a technical advisor to several anti-fossil fuel organizations and appeared in an activist's motion picture that attacked hydraulic fracturing.

The Parker County, Texas, incident – taken in context with similar egregious EPA actions and subsequent EPA reversals related to hydraulic fracturing operations in Pavilion, Wy. (Region 8) and Dimock, Penn. (Region 3) – leads me to believe that EPA's problems are national in scope.

Bad science, or science improperly skewed to deliver a preconceived result and promote an extremist agenda, is not science at all and does a disservice to policymakers of both major parties and the taxpayers.

These episodes underscore that the federal government possesses neither the expertise, nor the objectivity to regulate specific drilling and production techniques. Each state is geologically distinct from its neighbors. There is no one-size-fits-all solution or protection program.

Furthermore, the Region 6 episode suggests that Congress must exercise greater oversight of EPA regional offices and that EPA Regional Administrators should be subjected to Senate confirmation.

Finally, there is only one elected office that is indistinguishable from the bureaucracy that serves it, and that is the office of the President of the United States. Despite words and photo ops to the contrary, the President's actions, and the actions of his executive agencies, clearly indicate the President's anti-fossil fuel bias.

In this regard, Mr. Armendariz simply seems to have operated in a manner consistent with that of the rest of President Obama's Administration. To cite his own imagery, I have no doubt that Mr. Armendariz simply believed he was "crucifying" oil and gas producers as a loyal Roman soldier serving the emperor.

Thank you very much for allowing me to appear today. I look forward to any questions you may have.

---

[1] Independent Petroleum Association of America, 2012.
[2] IHS Global Insight, "The Economic Contribution of the Onshore Independent Oil and Natural Gas Producers to the U.S. Economy," April 2011.
[3] Ibid.
[4] Ibid.
[5] Testimony of Jeff Cloud, Oklahoma Corporation Commission, U.S. Senate Committee on Environment & Public Works, April 12, 2011.
[6] Ibid.
[7] Testimony of the Independent Petroleum Association of America, U.S. House Committees on Agriculture and Natural Resources, July 8, 2011.
[8] EPA, "EPA Region 6 Enforcement and Compliance Results for 2011," December 8, 2011.
[9] Al Armendariz, Ph.D., "Emissions from Natural Gas Production in the Barnett Shale Area and Opportunities for Cost-Effective Improvements," January 26, 2009.
[10] Ed Ireland, Ph.D., "Air Quality and the Barnett Shale," January 10, 2011.

SUMMARY

Testimony of Robert J. Sullivan, Jr.
Chairman, Oklahoma Independent Petroleum Association

U.S. House of Representatives
Energy & Commerce Committee
Subcommittee on Energy & Power

Wednesday, June 6, 2012

The domestic crude oil and natural gas industry is a highly decentralized amalgam of small businesses that already are effectively regulated at the state level.

America's 18,000 independent producers operate in 32 states and drill 95 percent of U.S. crude oil and natural gas wells. They are responsible for more than 4 million U.S. jobs and 4 percent of U.S. GDP. Most independent producers are small businesses with only about a dozen employees, but are nevertheless critical to U.S. energy security.

The Subcommittee hearing is critical to understanding how the personal agendas of senior EPA officials manifest themselves in overzealous enforcement actions and the limits of federal credibility when it comes to regulating exploration and production operations.

Mr. Armendariz spoke at the Oklahoma Independent Petroleum Association's annual meeting in June 2010. He sent a clear and direct signal to those in attendance that as Region 6 Administrator he intended to initiate an attack on oil and natural gas producers within Region 6.

Although the states are effectively regulating crude oil and natural gas exploration and production, opponents of fossil fuels wish to create anxiety over oil and natural gas development and state protections in an attempt to federalize the regulatory process, thus slowing development by increasing compliance costs.

Mr. Armendariz was a willing participant in this activist effort. However, his actions are consistent with others at EPA and merely reflect the anti-fossil fuel bias of the President of the United States.

Congress must exercise more oversight of EPA. EPA Regional Administrators should be subject to Senate confirmation.

# # #

Mr. WHITFIELD. Well, thank you.

Dr. Mintz, when I introduced you, I made the mistake of saying Nova Scotia University, and it is Nova Southeastern University where you are a Professor of Law, so you are recognized for 5 minutes.

STATEMENT OF JOEL A. MINTZ

Mr. MINTZ. Thank you, sir. We are a distance from Nova Scotia, actually. It is not a problem.

Mr. Chairman, Mr. Ranking Member and members of the subcommittee, my name is Joel A. Mintz. I am a Professor of Law at Nova Southeastern University in Fort Lauderdale, Florida. Since 1983, a major focus of my academic research and writing has been enforcement work of EPA. I have written three books and a number of book chapters and law review articles that touch on EPA enforcement. My most recent book, Enforcement at the EPA: High Stakes and Hard Choices, revised edition, which I actually have a copy of here for purposes of shameless self-promotion, was published in April by the University of Texas Press. That work, based on 190 personal interviews with government officials, as well as extensive documentary research, recounts the history of EPA's enforcement program from its beginnings in the early 1970s through January 2009. Since 2009, I have also conducted a number of informal telephone interviews with enforcement personnel at EPA and the Department of Justice to get a continuing sense of the major EPA enforcement developments and trends during the Obama administration.

My testimony before you today is intended to put the enforcement work of EPA during the Obama administration to date into context and historical perspective rather than to discuss any individual cases or regulations. My main point is simple and straightforward. For the past 3 ½ years, EPA's approach to enforcement has employed the same overall philosophy and strategy that has characterized EPA enforcement since the early 1970s. Rather than being uniquely overzealous or draconian, EPA enforcement in the Obama years has followed longstanding patterns established at EPA well before 2009.

From the agency's beginnings in the Nixon administration to the present day, EPA enforcement, with only a few brief periods of exception, has been based on a theory of deterrence. Under this deterrence theory, which is scarcely unique to EPA, violations of the law are to be detected promptly, and fairly and appropriately punished, as a way of deterring the individual violator and others similarly situated from violating the law in the future. The theory assumes that individuals and firms are rational economic actors who will comply with the law when the probability of detection is great enough, and the penalties are high enough, that it becomes economically irrational for them to violate the law. Of course, the constitutional rights of all citizens must be strictly protected during this process, both because it is the right thing to do and because enforcement cases will not succeed in the courts where citizens' rights are violated.

Throughout EPA's history, with only minor exceptions, decisions regarding which industries and companies should be the focus of

enforcement actions, and whether those actions should be administrative, civil judicial, or criminal in nature, have been made by career enforcement professionals and not by political appointees. From the George H.W. Bush administration through the Obama administration to date, for approximately a third of its enforcement work, EPA's enforcement staff has relied on a national priority approach that targets particular industries and national or international firms for intensive, comprehensive enforcement actions. This targeting approach is a neutral, non-political procedure that employs statistical analysis of data to give enforcement priority to industries and firms which have the worst compliance records, and whose environmental releases do the most harm to the health of Americans.

EPA's own annual enforcement reports provide statistical evidence that EPA enforcement under Obama has not been uniquely harsh. They reveal, for example, that during the eight years of the George W. Bush administration, the civil penalties assessed against environmental law violators averaged $117 million per year. In contrast, during the first 3 years of the Obama administration, EPA enforcement resulted in the assessment of a slightly lower amount of civil penalties: $115 million a year.

Similarly, EPA enforcement actions against the oil and gas industry declined during the Obama administration as compared with the preceding Presidency. EPA brought only 87 enforcement actions against the industry in 2011, while it initiated 224 such actions in 2002. Although there may well be good explanations for these declines, they do support the overall conclusions of my historical research: EPA's enforcement work during the Obama period has been similar in nature to the work it did in nearly every administration since the agency was established, regardless of the party affiliation of the President.

Thank you.

[The prepared statement of Mr. Mintz follows:]

Testimony of

Professor Joel A. Mintz

Before the

House Committee on Energy and Commerce

Subcommittee on Energy and Power

June 6, 2012

My name is Joel A. Mintz. I am a Professor of Law at Nova Southeastern University Law Center in Fort Lauderdale, Florida. Since 1983, a major focus of my academic research and writing has been the enforcement work of the EPA. I have written three books and a number of book chapters and law review articles that touch on EPA enforcement. My most recent book, *Enforcement at the EPA: High Stakes and Hard Choices* (revised edition) was published in April by the University of Texas Press. That work—based on 190 personal interviews with government enforcement officials as well as extensive documentary research—recounts the history of EPA's enforcement program from its beginnings in the early 1970s through January, 2009. Since 2009, I have also conducted a number of informal telephone interviews with enforcement personnel at EPA and the Department of Justice to get a continuing sense of the major developments and trends during the Obama administration.

My testimony before you today is intended to put the enforcement work of EPA during the Obama administration to date into context and historical perspective. My main point is simple and straightforward: for the past three and a half years, EPA's approach to enforcement has employed the same overall philosophy and strategy that have characterized EPA enforcement since the early 1970s. Rather than being uniquely overzealous or draconian, EPA enforcement in the Obama years has followed longstanding patterns, established at EPA well before 2009.

From the Agency's beginnings in the Nixon administration to the present day, EPA enforcement (with only a few, quite brief periods of exception) has been based on a theory of deterrence. Under this theory—which is scarcely unique to EPA—violations of the law are to be detected promptly, and fairly and appropriately punished, as a way of deterring the individual violator and others similarly situated from violating the law in the future. The theory assumes that individuals and firms are rational economic actors, who will comply with the law when the probability of detection is great enough, and the penalties are high enough, that it becomes economically irrational for them to violate the law. Of course, the

constitutional rights of all citizens must be strictly protected during this process—both because it is the right thing to do and because enforcement cases will not succeed in the courts where citizens' rights are violated.

Throughout EPA's history, with only minor exceptions, decisions regarding which industries and companies should be the focus of enforcement actions—and whether those actions should be administrative, civil judicial, or criminal in nature—have been made by career enforcement professionals, and not by political appointees. From the George H.W. Bush administration through the Obama administration to date, for approximately 1/3 of its enforcement work, EPA's enforcement staff has relied on a national priority approach that targets particular industries and national or international firms for intensive, comprehensive enforcement actions. This targeting approach is a neutral, non-political procedure that employs statistical analysis of data to give enforcement priority to industries and firms which have the worst compliance records, and whose environmental releases do the most harm to the health of Americans.

EPA's own annual enforcement reports provide statistical evidence that EPA enforcement under Obama has not been uniquely harsh. They reveal, for example, that during the eight years of the George W. Bush administration, the civil penalties assessed against environmental law violators averaged $117 million per year. In contrast, during the first three years of the Obama administration, EPA enforcement resulted in the assessment of a lower amount of civil penalties: $115 million per year. Similarly, EPA enforcement actions against the oil and gas industry declined during the Obama presidency, as compared with the preceding administration. EPA brought only 87 enforcement actions against this industry in 2011, while it initiated 224 such actions in 2002. Although there may well be good explanations for these declines, they do support the overall conclusions of my historical research: EPA's enforcement work during the Obama period has been similar in nature to its work in nearly every administration since the Agency was established, regardless of the party affiliation of the president.

Mr. WHITFIELD. Thank you, Dr. Mintz.
Mr. Etsitty, you are recognized for 5 minutes.

STATEMENT OF STEPHEN B. ETSITTY

Mr. ETSITTY. Good morning, Chairman Whitfield, Ranking Member Rush and members of the committee. On behalf of Navajo Nation President Ben Shelly, we extend our appreciation for the opportunity to present our views this morning.

I will focus on EPA's tribal consultation responsibilities and the Regional Haze Rule BART determination processes and our experiences working with Region 6 and EPA headquarters.

The Navajo Nation is a coal-based resource tribe with two large coal-fired power plants and associated mines on our lands, and the 1,800-megawatt San Juan Generating Station and San Juan Mine located just off the reservation in New Mexico. Both the San Juan plant and the San Juan mine are located outside the jurisdiction of the Navajo Nation but the plant and the mine have positive economic impact on the Nation and on the regional economy. Because of the Nation's substantial coal reserves and jobs in the energy sector, the Regional Haze Rule and other EPA rules will have long-reaching impacts on the Nation's sovereignty including our ability to independently develop our natural resource economy and provide economic security for our tribal members.

Recent rulemaking under the Regional Haze Rule by EPA imposed excessively stringent and expensive BART, or selective catalytic reduction control technology, on the San Juan plant and jeopardizes the continued viability of the power plant. In this regard, the EPA has a requirement to engage in meaningful consultation with the Navajo Nation in the development of regulations with tribal implications as recognized in Executive Order 13175 and EPA's tribal consultation policy section 4. However, EPA has failed to do so.

The standard for determining whether a regulation has tribal implications is whether a proposed regulation has "substantial direct effects on or more Indian tribes." The Federal Implementation Plan for the San Juan plant will have substantial direct effects on the Navajo Nation, San Juan plant, the San Juan Mine, subcontractors and seasonal workers. As the Nation stated in its comments on the proposed FIP for San Juan, EPA provides a facile conclusion that it does not have direct tribal implications because the FIP does not impose federally enforceable emission limits on any source located on tribal lands and neither imposes substantial direct compliance costs on tribal government nor preempts a tribal law.

However, the EPA failed to consider potential regional economic impacts and impacts on the local Indian tribes including the Navajo Nation and the inevitable impacts if San Juan Generating Station and its mine were forced to close as a result of the imposition of costly SCR technology.

EPA failed to conduct an accurate analysis of the potential social costs to the Navajo people. Should this final FIP result in closure of the San Juan plant and mine, hundreds of jobs will be lost, not only in the coal and power industry on the Nation but in the service support industry and public sector as well. A conservative estimate is that 318 Navajo jobs would be lost. This includes highly

paid jobs that are about 2.7 times the average Navajo Nation household income of $20,000. This lost revenue would reduce spending by about $25 million per year and a loss of nearly $1 million annually in sales tax receipts. An increase in the number of unemployed on the Navajo Nation caused by the closure of the San Juan plant or the San Juan Mine would result in increased demands on social services provided by the Navajo Nation and other government agencies at a time when other EPA rulemakings are threatening to diminish the Nation's coffers such as BART determinations at the Four Corners Power Plant and the Navajo Generating Station, which are located on the reservation. These increased demands for services would necessitate that the Navajo Nation divert an increased percentage of its already stressed budget to provide for the social needs of the unemployed. This would divert funding that could be spent on economic development and thereby stunt future economic growth on the Navajo Nation.

The Nation supports the substantive goals of the Clean Air Act and the goal of the Regional Haze Rule to provide visibility or to improve visibility in class I areas. However, implementation by EPA of the Regional Haze Rule and the BART process must be done with due analysis and accommodation of the critical economic interests of the Navajo Nation and the Navajo people and the continued operation of power plants in and near Navajo Indian Country. EPA has an obligation, a requirement to meaningfully consult with the Nation for rulemakings directly affecting the Nation before proposing a draft rule and after promulgating a final rule. That was not done for the proposed FIP for San Juan or for the advanced notice of proposed rulemaking for the Four Corners Power Plant and the Navajo Generating Station, and EPA therefore violated its consultation obligations and responsibilities to the Nation.

The Nation nonetheless remains hopeful that EPA will continue to improve its consultation practices in accordance with their own stated policies and to complete tribal consultation on the San Juan FIP and to work with EPA in a true government-to-government relationship.

Thank you.

[The prepared statement of Mr. Etsitty follows:]

Statement of Stephen B. Etsitty
Executive Director
Navajo Nation EPA

Committee on Energy and Commerce
June 6, 2012
Hearing Titled: "EPA Enforcement Priorities and Practices"

The Navajo Nation appreciates the opportunity to present its views on the United States Environmental Protection Agency's Enforcement Priorities and Practices. My Testimony this morning will focus on Regional Haze, the Best Alternative Retrofit Technology ("BART") determination processes, and our experiences working with Region VI, Region IX, and Environmental Protection Agency ("EPA") Headquarters.

The Navajo Nation ("Nation") is a primarily coal-based resource tribe that is the landlord for two large coal-fired plants and associated mines located directly on its tribal lands and close neighbor to one large coal fired power plant and associated mine located near the Nation. The Regional Haze Rule, 40 C.F.R. Part 51, 64 Fed. Reg. 35714 (July 1, 1999), directly affects the Nation's existing natural resource economy and its government revenue sources. Moreover, because of the Nation's substantial coal reserves and potential jobs in the energy sector, the Regional Haze Rule and other EPA rules will have long reaching impacts on the Nation's sovereignty, including the Nation's ability to independently develop its natural resource economy and provide economic security for its tribal members.

I. Introduction

The San Juan Generating Station ("SJGS"), a coal-fired electric power plant adjacent to the Navajo Nation, is of critical economic importance to the Navajo Nation and the Navajo people. The SJGS provides jobs to a significant number of Navajo people, both at the power plant and at the coal mine associated with the plant, as discussed further below. A recent rulemaking under the Regional Haze Rule by the EPA imposes excessively stringent and expensive BART on the SJGS and jeopardizes the continued viability of the power plant.

Accordingly, the Navajo Nation filed an Amicus Curiae brief in *Wild Earth Guardians, et al., v. United States Environmental Protection Agency*, Tenth Circuit Case Nos. 11-9552, 11-9557, and 11-9567,in support of the Public Service Company of New Mexico ("PNM") and of New Mexico Governor Martinez and the New Mexico Environment Department (collectively "New Mexico"), in their petitions for review of the BART rulemaking for the SJGS (entitled "Approval and Promulgation of Implementation Plans; New Mexico; Federal Implementation Plan for Interstate Transport of Pollution Affecting Visibility and Best Available Retrofit Technology Determination," 76 Fed. Reg. 52,388 (Aug. 22, 2011) ("FIP").

The Navajo Nation ("Nation") is the largest sovereign Indian Nation both in terms of population and land area in the United States. The Nation is the homeland of approximately 300,000 Navajo people, covers more than 27,000 square miles, and shares territory with the

states of Arizona, New Mexico, and Utah. Much of the Nation is in close proximity to areas covered by the Regional Haze Rule (known as "Class I" areas under Clean Air Act, see 42 U.S.C. § 7472(a)).

As economic census data continues to illustrate the Nation has remained extremely economically depressed for many generations. In economic terms, it is one of the two poorest areas in the United States, with an unemployment rate that has increased from 42.16% in 2001 to 50.52% in 2007. Since the current national recession hit in late 2008, the Nation has suffered even more unemployment, particularly for younger Navajo people, who are often forced to move elsewhere. The average annual Navajo family income is about $20,000.

The SJGS is a four-unit coal-fired electric generating facility located in Waterflow, New Mexico, and has a generating capacity of 1800 megawatts. The SJGS is located approximately 17 miles east of Shiprock, New Mexico, a town of approximately 10,000 residents and the largest population center on the Navajo Nation. Coal for the SJGS is mined at the San Juan Mine, located about 18 miles east of Shiprock.

While both the SJGS and the San Juan Mine are located outside the jurisdiction of the Navajo Nation, the plant and the mine have a significant positive economic impact on the Nation and on the regional economy.

The SJGS is a major employer in the northeastern portion of the Navajo Nation. Approximately 88 of the 400 employees (22%) at the plant are Native American, most being Navajo. About 230 of the San Juan Mine 500-person workforce (approximately 46%) are Native American, with most also being Navajo. In addition, many of the temporary workers hired during times of scheduled maintenance at the SJGS and the major contractors to the SJGS are comprised of mostly Navajo employees.

II. EPA's Obligation to Engage in *Meaningful* Tribal Consultation

As recognized in E.O. 13175, "the United States has a unique legal relationship with Indian tribal governments as set forth in the Constitution of the United States, treaties, statutes, Executive Orders, and court decisions." Accordingly, every federal agency "shall have an accountable process to ensure *meaningful and timely* input by tribal officials in the development of regulatory policies that have tribal implications." (emphasis added). As the EPA recognizes in its EPA Tribal Consultation Policy, Section IV, EPA shares the federal government's trust responsibility derived from the historical relationship between the federal government and Indian tribes.

For purposes of the required tribal consultation, the standard for determining whether a regulation has tribal implications is not whether it "impose[s] substantial direct compliance costs on tribal governments," but rather whether a proposed regulation has "substantial direct effects on one or more Indian tribes." As discussed above, the FIP for SJGS will have substantial direct effects on the Navajo Nation, the SJGS, San Juan Mine, subcontractors, and seasonal workers. This represents about 318 households of the Navajo Nation and includes highly paid jobs that are about 2.75 times the average Navajo Nation Household Income of about $20,000. Regionally,

coalmine jobs pay an average annual income of more than $55,000, and loss of comparable paying jobs at the SJGS would be devastating, both directly and indirectly, to many Navajo people.

Closure of the SJGS and San Juan Mine would also affect the Navajo Nation's tax base. Approximately 318 workers from the SJGS, San Juan Mine, and related activities reside on the Navajo Nation. These individuals purchase goods and services produced, processed or extracted from the Navajo Nation, and 4% sales tax is assessed on all sales of goods and services within the Navajo Nation. In the event that the SJGS and San Juan Mine are closed and workers are laid off, these individuals will have less money to spend. This would reduce the sales tax revenue collected by the Navajo Nation and place additional social safety net obligations on the Navajo Nation.

EPA has a trust responsibility to the Navajo Nation in this circumstance. Nonetheless, despite the unique impact that this FIP and other impending BART rulemaking in Navajo Indian Country will have on the Navajo Nation, the EPA failed to conduct requisite "outreach" to the Nation and consultation prior to publishing the proposed FIP for SJGS.

Because of this lack of outreach and consultation, Navajo Nation President Ben Shelly sent a letter on May 3, 2011 to Dr. Armendariz, Regional Administrator, EPA Region VI, requesting formal government-to-government consultation with EPA on the FIP for SJGS. It was especially disappointing to again have to remind EPA of its consultation obligations to the Nation at a time when other air-quality rulemakings for the Nation's power plants were pending: (BART for Navajo Generating Station ("NGS") and the Four Corners Power Plant ("FCPP"), and the MATS Rule. The Nation has had to request consultation on those aforementioned rulemakings eventhough EPA had just finalized its Tribal Consultation Policy purportedly to better implement E.O. 13175 and its 1984 Indian Policy.

As a result of the President's request, EPA staff met with President Shelly and other Navajo Nation officials and counsel on May 20, 2011, in Albuquerque, New Mexico. At that meeting, the parties discussed the Nation's comments and concerns about the proposed FIP for SJGS. The Nation appreciates the opportunity provided by EPA. However, the approximately two-hour consultation, only provided at the eleventh hour of the FIP rulemaking, was neither meaningful nor adequate tribal consultation. In fact, contrary to its Tribal Consultation Policy, EPA never provided feedback to the Nation regarding its comments at the May 20, 2011 meeting, and the Nation is therefore unaware how its concerns were weighed or considered by the agency, if at all. The EPA can and must do better to engage with the Nation in meaningful government-to-government consultation in this and other rulemakings, which have the potential to so catastrophically impact the Nation through EPA regulation. Indeed, EPA made only one change in the final FIP for SJGS that was positive for the Nation compared with the proposed rule.

The Nation nonetheless remains hopeful that EPA will improve its consultation practices, in accordance with its stated policies, and looks forward to beginning to work with the EPA in a true government-to-government relationship as the Regional Haze Rule is implemented in the southwest and across the Navajo Nation and as other rule-makings are undertaken.

III. EPA's Failure to Analyze Impacts to the Nation from the SJGS FIP

In its April 4, 2011 comments on the draft FIP for SJGS, and in its Amicus Brief in *Wild Earth Guardians, et al., v. United States Environmental Protection Agency*, the Nation pointed out EPA's failure to comply with its own regulations and fully analyze all five BART factors for all available retrofit control technologies that are technically feasible, and how EPA also failed to consider critical economic impacts to the Nation and Region as required as part of the BART analysis, and pursuant to its trust responsibility and government-to-government relationship with the Nation. Specifically, EPA failed to consider potential regional economic impacts and impacts on local Indian tribes, including the Navajo Nation, and the inevitable impacts if SJGS and its mine were forced to close as a result of imposition of costly SCR technology.

As the Nation stated in its comments on the proposed FIP for SJGS, EPA provides the facile conclusion that it does not have direct "tribal implications," as defined in E.O. 13175, because the FIP does not impose federally enforceable emissions limitations on any source located on tribal lands, and neither imposes substantial direct compliance costs on tribal governments, nor preempts tribal law.

This is not an accurate analysis of the potential social costs to the Navajo people. On the contrary, should the final FIP for SJGS result in closure of SJGS, hundreds of jobs will be lost, not only in the coal and power industry on the Nation, but in the service support industry and public sector as well. If the SJGS closes as a result of EPA's BART FIP, a conservative estimate is that 318 Navajo jobs would be lost, representing an annual loss of about $17.7 million. This would reduce spending by about $25 million per year after adjusting for an income multiplier and a loss of nearly $1 million annually in sales tax receipts for the Navajo Nation, which is a significant loss for the Navajo Nation's General Fund. An increase in the number of unemployed on the Navajo Nation caused by the closure of the SJGS or San Juan Mine would result in increased demands for social services provided by the Navajo Nation. At a time when other EPA rulemakings are threatening to diminish the Nation's coffers, such as BART determinations at the FCPP and the NGS, these increased demands for services would necessitate the Navajo Nation diverting an increased percentage of its already stressed budget to provide for the social needs of the unemployed. This would divert funding that could be spent on economic development and thereby stunt future economic growth on the Navajo Nation.

IV. Other EPA Rulemakings Affecting the Navajo Nation

On February 25, 2011, EPA, Region IX, proposed an Alternative Emission Control Strategy ("AECS"), a better-than-BART determination which supplemented its previous October 19, 2010 proposal for FCPP. The AECS takes into account the FCPP proposal to shutdown Electrical Generating Units ("EGUs") 1, 2 and 3 (of 5 total EGUs). The loss of this total net capacity of 560 MW by 2014 would result in 100% control of NO_x, SO_2, PM, Hg and other hazardous pollutants from these EGUs, which would significantly reduce emissions from FCPP.

Currently, EPA, Region IX, has delayed proposing BART for NGS pending crucial consultations with stakeholder tribes. After publication of the Advance Notice of Proposed

Rulemaking ("ANPR") for BART for NGS and FCPP, the Navajo Nation recommended a phased approach to emissions controls for those plants, and suggested that the EPA consider the multiple interests at stake, including the significant economic interests of the Navajo Nation. The Navajo Nation previously commented that EPA should have explicitly analyzed the impact of the MATS rule in conjunction with these other rulemakings and provide flexibility for compliance scheduling so that FCPP and NGS, upon which the Navajo Nation economy is almost entirely reliant, can continue their operations. The Nation also commented that the EPA should also analyze the impact of future rulemakings, such as GHG regulation, which have the potential to insert yet another layer of compliance costs and compliance scheduling for coal-fired power plants to meet, and constitute severe challenges to the Navajo Nation economy.

We acknowledge that EPA has begun to implement its Tribal Consultation Policy with affected Indian tribes and is working closely with other federal agencies, including the Department of the Interior, on these issues. While the Nation appreciates that EPA is apparently sensitive to the plight of FCPP and NGS under its current rulemakings, equally critical to the Nation's and the regional economy is the future of SJGS. EPA must use the flexibility it has under the CAA to develop a rational scheme integrating its multiple rulemakings and timelines, especially given the goal under the Regional Haze Rule to gradually phase in visibility reductions in Class I Areas up until 2064. To the extent the EPA is unable to be flexible because of statutory requirements under the CAA, the Nation urges Congress to consider amendments to the CAA that will allow for such flexibility.

Specifically in making BART determination, EPA also must not be allowed to invert the intent of Congress that local governments, including tribes, have exclusive authority to make discretionary policy decisions consistent with the needs of their constituents and regional economies, so long as they meet the requirements of the CAA and further the national goal of pristine conditions at Class I areas under the Regional Haze Rule.

V. Conclusion

The Nation supports the substantive goals of the CAA, and the goal of the Regional Haze Rule to improve visibility at Class I areas. However, for the Nation as a tribal nation and a small government landlord of affected EGUs and associated mines, implementation by EPA of the Regional Haze Rule and BART must be done with due analysis and accommodation of the critical economic interests of the Navajo Nation and the Navajo people in the continued operation of power plants in and near Navajo Indian Country. EPA has an obligation to meaningfully consult with the Nation for rulemakings directly affecting the Nation before promulgating a draft rule. That was not done for the proposed FIP for SJGS, or for the ANPR for the FCPP and NGS, and EPA therefore violated its consultation obligations and trust responsibility to the Nation.

EPA's "one size fits all" approach to rulemaking fails to acknowledge or address the specific concerns and impacts to the Navajo Nation, as well as regional impacts. Making matters worse, EPA's uncoordinated approach to rulemakings impacting the same industries creates regulatory uncertainty, increases compliance costs, and puts at substantial risk the national and regional economies, critical jobs of Navajo people, and the very viability of the Navajo

government. Congress should therefore strongly consider amending the CAA to mandate an integrated scheme for EPA rulemaking, and to allow industry to implement the Regional Haze rule and other EPA rulemakings in a rational fashion and within a reasonable time frame, while still protecting the health and welfare of the public and meeting the substantive goals of the CAA.

Respectfully,

THE NAVAJO NATION

Stephen B. Etsitty
Executive Director
Navajo Nation Environmental Protection Agency

Mr. WHITFIELD. Thank you very much.
Mr. Short, you are recognized for 5 minutes.

STATEMENT OF ALLEN SHORT

Mr. SHORT. Thank you, Mr. Chairman and Ranking Member Rush and members of the Subcommittee on Energy and Power. Good morning. My name is Allen Short. I am the General Manager of the Modesto Irrigation District located in California's Central Valley. Thank you for the opportunity to speak with you about EPA's enforcement as what you just have heard, the Regional Haze Rule at the San Juan Generating Station. The coal-fired plant, as you now know, is located in New Mexico, specifically in EPA Region 6. I am here because the San Juan station is a significant source of electric power for hundreds of thousands of customers throughout California.

Modesto Irrigation District is a local, publicly owned utility that is in partnership with the city of Santa Clara, the city of Redding, which form the M–S-R Joint Power Agency. We serve roughly 210,000 customers in California, and the M–S-R owns a mix of generating resources including a share of the Generating Station Unit 4, which provides 150 megawatts to M–S-R members. The station is also an important source of electricity for the Southern California Public Power Authority, SCPPA, whose members serve almost 5 million customers. SCPPA members own a part of San Juan as well. Collectively, California public utilities own 24–1/2 percent of the San Juan station. The principal owner and operator of the San Juan station is Public Service Company of NM, PNM, an investor-owned utility.

My testimony is on behalf of MID, M–S-R and SCPPA. Under the Clean Air Act regional haze provision, each State and EPA are required to develop and implement plans to help restore natural visibility at 156 national parks and wilderness areas by the year 2064. To comply, the State of New Mexico proposed a plan for the generation facility that would meet the goals and objectives of the rule with an emissions technology which would cost approximately $77 million. Unfortunately, EPA rejected the State plan for the San Juan Generating Station and has established a Federal plant that requires installation of emissions control technology costing somewhere between $750 and $805 million, and this is based upon installation bids from firms specializing in this technology. The bids are more than twice EPA's cost estimate of $345 million. Although EPA's approach would cost 10 times more than the State plan, it would remove only slightly more haze, an improvement that would be virtually imperceptible to the human eye.

It is important to understand the Regional Haze Standards are not health-based standards. They are about visibility only. This is why cost-effectiveness and reasonableness are the main factors for selecting the regional haze emissions technology. By grossly underestimating the real cost of its plan, EPA also overstates the cost-effectiveness. M–S-R and SCPPA share a cost for EPA plan to its customer will range from $272 to $2,250 per annual per year. This is also on top of the many stringent mandates that California has imposed upon electric utilities.

Environmental organizations want the Federal plan to be implemented on a timetable that would require shutting down all or parts of the station during installation and could affect the reliability of the regional transmission grid. Environmental groups have also asked the California Energy Commission to prevent M–S-R and SCPPA from paying for regional haze compliance at San Juan. San Juan owners must begin the Federal plan immediately. New Mexico Governor Suzanna Martinez has asked EPA to stay implementation of the plan so that the State and EPA and PNM can work towards an agreeable alternative to the State and Federal plans. We strongly support the Governor's effort to sit down and talk with EPA.

California public utilities are willing to do their share to reduce regional haze through cost-effective and reasonable improvements to the station but our customers should not have to pay for the extreme cost of technologies that produce only marginal benefits as compared to similarly effective alternatives. Again, this falls down to the customer who will actually pay for it. It will have an effect on the California economy, jobs and home foreclosures.

Thank you.

[The prepared statement of Mr. Short follows:]

Short Summary
Testimony of Allen Short
General Manager, Modesto Irrigation District (MID) on behalf of
MID, M-S-R Public Power Agency, and the Southern California Public Power Authority
June 6, 2012

M-S-R Public Power Agency (M-S-R) and Southern California Public Power Authority (SCPPA) are minority owners in the San Juan Generating Station (SJGS), a four-unit 1,680 MW coal-fired power plant in Farmington, New Mexico, which is in EPA Region 6. M-S-R and SCPPA member agencies receive a significant amount of electric power from the SJGS

M-S-R and SCPPA support New Mexico's State Implementation Plan (SIP) to implement the Clean Air Act's regional haze requirements at the SJGS. The Act's regional haze provisions are intended to gradually improve visibility in national parks and wilderness areas. The New Mexico SIP would reduce haze-causing NOx emissions from the SJGS by 20% through the installation of Best Available Retrofit Technology (BART) over a five-year period at an estimated cost of $77 million.

EPA has rejected the State's approach, issuing a Final Rule in Aug. 2011, that set a regional haze standard for SJGS that is far more stringent than standards imposed elsewhere. EPA's federal implementation plan (FIP) requires the installation of emissions control technology that would cost $750-805 million, based on bids from experienced engineering firms competing to do the work. These real-world estimates are more than twice EPA's estimate of $345 million.

Although EPA's plan would cost 10 times more than the state's plan, it would remove only slightly more haze -- and the improvement would be *virtually imperceptible to the human eye.*

EPA's regional haze FIP for SJGS could affect grid reliability. Environmental groups have asked the court to require that the five-year FIP be put on a three-schedule. This would necessitate shutting down some or all of the generating units at SJGS for two years while emissions controls are installed. A study commissioned by M-S-R concluded that taking SJGS off-line would cause overloads and possible instability on portions of the transmission grid in the Southwest.

SJGS owners have challenged EPA's regional haze FIP in court and have asked EPA to stay enforcement its FIP while the court considers the matter. Recently, New Mexico Gov. Susana Martinez (R) also asked EPA to stay its regional haze order to allow the State, EPA and Public Service of New Mexico (PNM), SJGS's operator, to work toward a compromise plan. We support Gov. Martinez's proposal.

Separately, the Sierra Club and the Natural Resources Defense Council (NRDC) have petitioned the California Energy Commission (CEC) to initiate a rulemaking that would bar SJGS's owners in California from paying their share of regional haze compliance costs for the plant. The environmental groups allege that such investments violate California's greenhouse gas (GHG) emissions law, SB 1368, which prohibits investments that would extend the life of existing coal-fired power plants. The California owners of SJGS disagree with this interpretation of the GHG law.

The California public agencies that have ownership interests in SJGS are willing to do their share for clearer air with cost-effective improvements to bring the plant into compliance with Clean Air Act standards. That is why we support the New Mexico SIP. But our ratepayers should not be required to pay for extremely costly mandates that produce only marginal benefits as compared to far less expensive but similarly effective alternatives.

###

Testimony of
Allen Short, General Manager, Modesto Irrigation District
On behalf of
The Modesto Irrigation District,
M-S-R Public Power Agency
And the Southern California Public Power Authority

Before the
Committee on Energy and Commerce,
Subcommittee on Energy and Power
United States House of Representatives

EPA Enforcement Priorities and Practices

Washington, D.C.
June 6, 2012

Chairman Whitfield, Ranking Member Rush and Members of the Subcommittee on Energy and Power:

Good morning. My name is Allen Short and I am the General Manager of the Modesto Irrigation District (MID) in California's Central Valley. Thank you for the opportunity to speak with you today about the potential impacts of the Environmental Protection Agency's approach to enforcement of the Clean Air Act's Regional Haze rule at the San Juan Generating Station, a four-unit 1,680 MW coal-fired power plant near Farmington, New Mexico, which is in EPA Region 6. I am here because the San Juan Generating Station is a significant source of electric power for hundreds of thousands of homes and businesses in Northern, Central and Southern California, as well as in New Mexico and Utah.

My purpose in speaking to you today is to bring to your attention our concerns about EPA's regional haze *federal implementation plan* (FIP) for the San Juan Generating Station, which was finalized last year. The EPA FIP costs 10 times more than a similarly effective *state implementation plan* (SIP) proposed by the State of New Mexico. EPA rejected that portion of New Mexico's plan dealing with the San Juan Generating Station, and instead EPA has mandated emissions controls that will cost hundreds of millions of dollars but produce only marginal haze improvements as compared to the State plan.

MID is a local publically owned utility that provides irrigation service to nearly 60,000 acres and electric service to approximately 113,000 accounts. Annual peak electric demand is more than 600 MW, which MID meets with a mix of hydroelectric, wind, solar and thermal generation. MID is in partnership with the City of Santa Clara and the City of Redding in the M-S-R Public Power Agency (M-S-R), which has made investments in renewable and thermal generation resources to provide electricity to 210,000 residential and commercial customers in three counties of Central and Northern California. Among those resources is the San Juan Generation Station. M-S-R owns a 28.8-percent share of San Juan

Generating Station Unit 4, which provides 150 MW annually to M-S-R, representing nearly 25 percent of MID's total supply and 15 percent of Santa Clara's and 21 percent of Redding's municipal power supplies (based on calendar year 2010 retail sales).

The San Juan Generating Station is also an important source of electric power for public utilities that are participants in the Southern California Public Power Authority (SCPPA), whose members are 11 municipalities and one irrigation district that deliver electricity to approximately 4.8 million people over an area of 7,000 square miles. Five SCPPA members own a 41.8 percent of San Juan Unit 3, and the City of Anaheim, also a SCPPA member, owns a 10 percent share of San Juan Unit 4.

The principal owner of the San Juan Generating Station is the Public Service Company of New Mexico (PNM), an investor-owned utility that also operates the plant. My testimony today is on behalf of the public utilities that are San Juan's minority owners in California: the Modesto Irrigation District, M-S-R Public Power Agency and the Southern California Public Power Authority.

Summary

The Clean Air Act has charged EPA and the states with improving the air quality in national parks and wilderness areas. In 1999, EPA issued the Regional Haze Rule that requires the states, in coordination with EPA and other federal agencies, to develop and implement air quality protection plans to address regional haze by improving visibility at 156 national parks and wilderness areas. Specifically, states are required to establish goals for improving visibility and develop long-term strategies over a 60-year period to reduce emissions of air pollutants that cause visibility impairment.

In 2011 the State of New Mexico proposed a regional haze SIP that would reduce haze-causing nitrogen oxide (NOx) emissions from the San Juan Generating Station by 20 percent through the installation of Best Available Retrofit Technology (BART) over a five-year period at an estimated cost of $77 million. However, EPA issued a final rule in August, 2011, that set a regional haze standard for San Juan that is far more stringent than standards that have been imposed elsewhere. The rule established a regional haze FIP for the San Juan Generating Station that requires the installation of emissions control technology that would cost $750 million to $805 million, based on bids from two reputable engineering firms specializing in this technology. Although EPA's plan would cost 10 times more than the state's plan, it would remove only slightly more haze -- and the improvement would be *virtually imperceptible to the human eye*[1].

Though it rejected provisions of the New Mexico SIP addressing regional haze controls at the San Juan Generating Station, EPA approved the rest of the State's plan on May 31, 2012.

The San Juan Generating Station's owners have challenged EPA's regional haze FIP in federal court. In addition, the owners and the State of New Mexico have asked EPA for a stay of enforcement of the FIP while the matter is being considered by the courts. Without a stay, the owners have no choice but to begin carrying out the EPA order immediately, incurring tens of millions of dollars in engineering and construction costs for work that the courts may ultimately determine isn't necessary.

---

1 Visibility improvements are measured by an index scaled in deciviews (dv) which are analogous to the decibel scale for sound. A one dv change is approximately a 10% change in the extinction coefficient. The improvement in visibility effected by the State plan is about 1 dv and by the EPA plan is about 1 ½ dv at Mesa Verde National Park. If, for example, median summer visibility in region is 50 miles, the State plan would improve visibility to 72 miles while the EPA plan would improve visibility to 78 miles. According to material published by Colorado State University this 6 mile difference in visibility would be imperceptible to 90% of the populace. (Based on Figures 2 & 3 retrieved April 30, 2012 from: http://vista.cira.colostate.edu/improve/publications/NewsLetters/apr_93.pdf)

The Modesto Irrigation District and the other members of M-S-R and SCPPA support New Mexico's regional haze SIP because it provides a cost-effective means of significantly reducing the San Juan Generating Station's contribution to regional haze without imposing an undue burden on our customers. It also contributes to meeting New Mexico's first interim goals along a long-term path to improve visibility and restore Class I areas to natural conditions by 2064, as required by the Clean Air Act. In contrast, EPA does not appear to have given any consideration to how its regional haze FIP for the San Juan Generating Station would affect hundreds of thousands of ratepayers in California, New Mexico and Utah, nor has EPA weighed the plan's possible adverse effects to the reliability of the transmission system.

EPA grossly underestimated the cost of its implementation plan. Bids received last month for installation of the FIP-mandated emissions control technology -- Selective Catalytic Reduction (SCR) -- at the San Juan Generating Station ranged from $750 million to $805 million, not including engineering, project management and insurance costs estimated to be about $48 million. These real-world estimates are more than twice EPA's latest estimate of $345 million to retrofit SCR emissions controls at the San Juan Generating Station. The EPA contractor that prepared the estimate failed to consider or include consideration for a number of significant cost drivers specific to the San Juan Generating Station, such as plant elevation, physical limitations within the plant footprint, and the scope of the equipment required. The minimal visibility gains offered by the EPA's FIP over the New Mexico state plan would not justify the added cost even if EPA's original estimate were correct, and they certainly do not justify a price tag more than 10 times the size of the New Mexico's SIP.

EPA's regional haze FIP for the San Juan Generating Station could also affect the reliability of the electric grid in the Southwest. Although the five-year implementation schedule currently mandated by

the FIP is feasible, though challenging, Wildearth Guardians and other environmental organizations have petitioned the federal courts to require a three-year implementation schedule. Because completing the installation of SCR emissions controls on a three-year schedule is not feasible, each of the units of the San Juan Generating Station would have to be shut-down in the fourth and fifth years (2015-16) until their individual upgrades are complete. M-S-R commissioned a preliminary study of the reliability impacts of a shutting down all four units of the San Juan Station on either a short-term or permanent basis. This study found that while there is enough unutilized electric power in the Western United States to replace the San Juan plant's generation, moving that power to where it is needed would cause overloads and possible instability on portions of the transmission grid in New Mexico, Arizona and Colorado, violating North American Electric Reliability Corporation (NERC) Standards that are intended to ensure the reliability of the bulk power system in North America.

Both the State and EPA plans pose a special quandary for the California owners of the San Juan Generating Station because fulfilling the Clean Air Act requirements at the San Juan plant is seen by some as a violation of one of California's greenhouse gas (GHG) laws. That law (SB 1368) prohibits publicly owned utilities from investing in power plants whose carbon dioxide (CO_2) emissions exceed a state standard equivalent to CO_2 emissions levels from a natural gas plant. While the San Juan Generating Station exceeds that standard, California's law allows existing contractual and ownership obligations to remain in place and exempts routine maintenance work at these facilities.

However, the Sierra Club and the Natural Resources Defense Council (NRDC) have recently asked the California Energy Commission to issue rules that would effectively prevent the M-S-R and SCPPA utilities from fulfilling their contractual obligations to help pay for regional haze improvements at the San Juan Generating Station that are necessary to meet the requirements of federal law.

The Sierra Club and NRDC have also questioned whether investments by California public power agencies in *existing* environmental upgrades at the San Juan Generating Station violated California's GHG law. Over the last decade the San Juan Generating Station owners have invested more than $430 million to install additional emissions control equipment, including the nation's first full-scale mercury removal systems. In fact, the San Juan Generating Station is compliant with the EPA's MACT rule. The most recent environmental retrofit was completed in 2009 at a cost of about $320 million. These improvements have cut the plant's NOx emissions by 44 percent, reduced sulfur dioxide (SOx) and particulate matter by more than 70 percent and enabled a 99 percent mercury removal efficiency rate. But the Sierra Club and NRDC allege that these environmental improvements may be illegal investments by the M-S-R and SCPPA utilities --- even though the Sierra Club was signatory to the Consent Decree requiring San Juan's owners to perform the upgrades.

The California utilities that are part of M-S-R and SCPPPA are non-profit agencies charged with the delivery of affordable, reliable energy to their customers. Fulfilling that mandate has become increasingly difficult as California's GHG law and renewable portfolio standards have made electricity more expensive. Compliance with just the GHG and renewable energy standard laws alone will cause an estimated 12.9 percent increase in the monthly electric bills of MID customers by 2020. Complying with the EPA Region 6 regional haze FIP for the San Juan Generating Station will add yet more to the ratepayers' burden – at least $50 per year for the average Modesto customer.

But we are hopeful that EPA will consider alternatives to its regional haze FIP for the San Juan Generating Station. On April 26, New Mexico Governor Susana Martinez asked EPA to stay its regional haze FIP so that the State, EPA and PNM can work toward an agreeable alternative to both the EPA and the New Mexico regional haze plans. We appreciate and support the Governor's effort.

We also appreciate the Committee's interest in EPA's approach to enforcement of regional haze requirements. This is a national issue. New Mexico's regional haze SIP is one of 37 state regional haze plans that EPA is committed to take action on before the end of this year under the terms of a consent decree settling litigation brought by environmental organizations. Our New Mexico case is an example of how EPA's enforcement of regional haze regulations is neither effective nor mindful of the financial impacts to electric customers.

New Mexico and Federal Implementation Plans

The Clean Air Act includes provisions intended to control emissions that contribute to regional haze that impairs views in national parks and wilderness areas. The Act gives states primary authority on the scope of regional haze remediation, within certain boundaries, requiring the states to take the lead in designing and implementing regional haze plans intended to make "reasonable progress" toward the Act's goal of restoring "natural visibility" in parks and wilderness areas by 2064.

The Act also gives states primary responsibility to make BART determinations for the unique circumstances of each state and emission source. States are given broad discretion in BART determinations because the states are in the best position to understand local conditions and concerns. It is important to understand that the regional haze rule is not a health-based standard and that cost-effectiveness is one of the five factors that must be considered in a BART analysis.

The state of New Mexico drafted a regional haze SIP that would require selective non-catalytic reduction (SNCR) controls to be installed at the San Juan Generating Station. The New Mexico SIP meets the requirements of the Clean Air Act at a total cost of about $77 million for the San Juan Generating Station -- a significant, but manageable cost.

Nevertheless, EPA rejected the San Juan Generating Station portion of the New Mexico SIP, and on August 22, 2011, EPA issued a Final Rule on a FIP to address NOx and SOx emission limits at the San Juan Generating Station. (As previously mentioned, the balance of New Mexico's SIP was just approved by EPA on May 31 of this year.) EPA's regional haze FIP mandates NOx controlled emission rates (0.05 lbs/MMBTU) for the San Juan Station that are not only inconsistent with other recently adopted regional haze FIPs in EPA Region 6 and EPA Region 9 for coal-fired generation, the rates are *five times lower than those mandated* by either the EPA's Regional Haze Provision Authority (0.23lb/MMBTU) or EPA's Good Neighbor Provision Authority (0.28 lb/MMBTU). To accomplish the aggressively low rate of 0.05 lb/MMBTU, EPA's San Juan Generating Station FIP mandates the use of SCR technology that is far more costly than the similarly effective SNCR technology included in New Mexico's SIP.

We are particularly concerned that even after spending almost a billion dollars to comply with EPA's regional haze FIP requirements, we may still not be in compliance. Firms bidding to install the SCR controls at the San Juan Generation Station informed PNM that they could not guarantee that the NOx emission rate mandated by EPA's FIP could be achieved at San Juan and that sulfuric acid emissions could not be reliably measured at the level that the FIP requires.

Making reasonable progress toward improving visibility over a 60-year period should not require huge investments for minimal or imperceptible benefits. EPA also must use the best available science when projecting visibility improvements for its preferred SCR technology. EPA's outdated visibility modeling exaggerates the visibility improvements of SCR and the corresponding cost effectiveness[2].

[2] Petition of Public Service Company of New Mexico for Reconsideration and Stay of EPA's Final Rule: "Approval and Promulgation of Implementation Plans; New Mexico, Federal Implementation Plan for Interstate Transport of Pollution Affecting Visibility and Best Available Retrofit Technology Determination" October 21, 2011, Page 44 (Docket No. EPA-R06-OAR-2010-0846)

Impact to California households and businesses

M-S-R has analyzed the potential cost impacts of the installation of the EPA-mandated SCR technology at the San Juan Generating Station based on an $800 million-to-$805 million estimate confirmed by the recent construction bids. M-S-R's share of the costs for its 28.8-percent interest in San Juan Generating Station Unit No. 4 are assumed to be covered by the issuance of $85 million in new tax-exempt debt to be amortized over a 10-year period coterminous with existing debt stemming from M-S-R's original ownership purchase of the San Juan Unit No. 4 in 1983. The increase in annual debt service would represent a 15-percent increase in the delivered cost of San Juan Generating Station power to M-S-R's members. On an individual member agency basis, the total cost increase for the next decade are $460 per customer for the City of Redding electric utility, $620 per customer for the MID and $920 per customer for the City of Santa Clara's utility.

SCPPA member cities Azusa, Banning, Colton, Glendale, and the Imperial Irrigation District collectively own 42 percent of San Juan Generating Station Unit 3, and Anaheim owns 10 percent of San Juan Generating Station Unit 4. The cost their customers would incur to upgrade to the SCR technology in EPA's plan would collectively be as much as $143 million. The total cost impact to each SCPPA owner is different based on its individual resource mix, but the impact is significant. For example, each of Glendale Water and Power's 83,000 customers would pay an additional $272, whereas Azusa Light and Water's 15,000 customers would pay $2,250 each toward the total cost of the SCR retrofit. Approximately 140,000 customers of the Imperial Irrigation District, who reside in one of California's poorest counties with some of the highest unemployment, would each face $850 in added costs.

Congressional Concerns

To highlight the impact EPA's plan would have on California electricity customers, a bipartisan group of 10 California Members of Congress *(Reps. Joe Baca (D), Jerry Lewis (R), Bob Filner (D), Mary Bono Mack (R), Dennis Cardoza (D), Gary Miller (R), Jim Costa (D), Wally Herger (R), Tom McClintock (R) and Jeff Denham (R))* wrote letters to EPA Administrator Lisa Jackson encouraging EPA to fully consider the information in the New Mexico SIP and take appropriate action. The California legislators expressed support for meeting federal regional haze requirements and asked EPA to carefully consider the significant rate impact that a SCR-based FIP would have on their constituents. They also emphasized that the regional haze requirements are a visibility-based standard that are supposed to be meet with the "best available control technology," which is defined in part by cost-effectiveness. Moreover, the bipartisan group of Members noted the significant environmental investments that the San Juan Generating Station's California owners are making to meet stringent California energy requirements, including requirements that utilities achieve a 30-percent reduction in GHG emissions and meet a 33-percent renewable energy standard by 2020.

Reliability Impacts

EPA's FIP for the San Juan Generating Station requires installation of the SCR controls over a five-year period; that clock started running last September. Environmental organizations that support EPA's efforts to mandate the more expensive SCR technology at the San Juan Generating Station, and at other coal plants in the nation, have asked the federal courts to impose a three-year installation schedule that cannot be achieved without shutting down multiple units of the San Juan Generating Station during the fourth and fifth year of the construction period until the retrofits are completed and tested. M-S-R asked Navigant Consulting, Inc. (Navigant) to undertake a preliminary assessment of the potential impacts on the transmission system if the San Juan Generating Station was taken out of service

during 2015 and 2016. The study (summary attached) focused on potential reliability impacts to the transmission grid for the region encompassing Arizona, New Mexico, the El Paso area of Texas, southwestern Colorado and southeastern Utah.

The preliminary assessment (which included power-flow analyses only) indicated that operating the regional transmission system with the San Juan generation off-line could:

- Result in new post-contingency transmission line overloads (of as high as 6%) on existing 230-kV and 115-kV lines in northern Arizona, northern New Mexico and southwestern Colorado.
- Increase the number and/or severity of the post-contingency transmission line overloads noted on two 115-kV lines in northeastern New Mexico, which are interconnected with the existing 230-kV line between the Walsenburg Substation in southern Colorado and the Gladstone substation in northeastern New Mexico.
- Result in post-contingency transmission voltage deviations of as high as 13% at the Ojo 345-kV bus in northern New Mexico.

It is possible that such large voltage deviations could be an indication of potential system instability, but determining if this is the case would require additional studies. Transmission system overloads or voltage instability would likely violate NERC standards that are intended to ensure the reliability of the bulk power system. If a shut-down of the San Juan Generating Station were to cause transmission system overloads or voltage instability, NERC standards that could be violated include standard BAL-STD-002 (sufficient locational operating reserves), standard BAL-004-WECC-01 (transmission line frequency maintenance), standard TOP-007-WECC-1 (System Operating Limits), and standard TOP-STD-007-0 (Operating Transfer Capacity Limits). Remedial Action Schemes (RAS) for the

affected transmission lines would need to be reviewed, revised, and/or otherwise upgraded. With substantially less generation available, a Transmission Operator may have difficulty restoring its system within acceptable time limits dictated by standard PRC-SDT-003-1.

California Energy Commission

California's GHG emissions law (SB) 1368 -- (*Perata, Chapter 598, Statutes of 2006*) required the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) to establish a GHG emissions performance standard and to implement regulations for all long-term financial commitments in baseload generation made by investor-owned and publicly owned utilities.

The California Emissions Performance Standard adopted by the CEC is 1,100 pounds (0.5 metric tons) of carbon dioxide (CO_2) per megawatt hour (MWh) of electricity, which is the rate of emission of GHG for combined-cycle natural gas baseload generation. Coal-fired power plants do not meet this standard. However, as the CEC has stated, *"SB 1368 is not intended to shut down currently operating power plants or lead to their deterioration..."* Rather, the purpose of the law is to reduce financial risks to electric consumers by ensuring that utilities do not make substantial investments to build new (coal-fired) power plants or extend the lives of existing plants where those investments are likely to result in additional environmental compliance costs under future GHG limitations. The law prohibits California utilities from acquiring or increasing ownership interests in plants that do not meet the California Emissions Performance Standard and prohibits investments that have the potential to extend the life of existing generating units by five years or more, or to increase generating capacity. Investments for routine maintenance are exempted. M-S-R and SCPPA believe that upgrades to meet federal environmental laws are part of power plant maintenance as mandated by the standard of Prudent Utility Practice.

In November, 2011, the NRDC and the Sierra Club filed a petition with the CEC alleging that publicly owned utilities, including M-S-R and SCPPA, have made past investments and plan to make future investments in existing baseload generation facilities that violate the intent of SB 1368. Specifically, the NRDC and the Sierra Club have questioned whether the California agencies with ownership interests in the San Juan Generating Station violated state law by helping to pay for environmental upgrades completed in 2009, including the nation's first full-scale mercury removal system. They cite as an example of future prohibited investments the retrofitting the San Juan Generation Station to comply with federal Clean Air Act regional haze requirements, contending that such environmental mandates are intended to "extend the life of the plant" and therefore clearly trigger the EPS restriction. The NRDC and the Sierra Club also question whether California law will allow the installation of groundwater pollution prevention improvements at the San Juan Generating Station, notwithstanding the fact that the Sierra Club recently entered into a consent decree requiring those improvements. The consent decree also requires the Sierra Club to support all approvals necessary for the San Juan Generating Station owners to install the groundwater protections.

In other words, NRDC and the Sierra Club argue that in the case of San Juan Generating Station, compliance with federal environmental law is a violation of California environmental law.

The NRDC and the Sierra Club have asked the CEC to modify its regulations to require that utilities submit for CEC review and approval *all* expenditures at non-Emissions Performance Standard - compliant plants, and that the CEC clarify that SB 1368 prohibits investments to bring existing coal plants into compliance with current environmental laws. The CEC has initiated a new Rulemaking (12-OIR-01) to look at whether changes to the California Emissions Performance Standard are necessary and the Commission is working to develop the scope of that proceeding.

The NRDC and the Sierra Club say that the California owners of the San Juan Generating Station should simply decline to make the investments necessary to bring the plant into compliance with federal regional haze standards. In their petition, the environmental organizations say that if the California owners were to refuse to pay their share of the regional haze improvements at the San Juan Generating Station, "those improvements should not go forward." The clear but unstated result would be closure of the plant.

But M-S-R and SCPPA utilities cannot simply decline to make the investments at San Juan that are necessary to comply with federal laws. We do not think that the regional haze FIP issued by EPA Region 6 complies with the Clean Air Act, but if the FIP is ultimately upheld, we are required by law and contract to comply with it. As public agencies we cannot choose to ignore such mandates on the basis of cost of compliance. Further, M-S-R's investment in the San Juan Generation Station was financed with tax-exempt bonds, and the agency has obligations and fiduciary duties to its bondholders and ratepayers.

National Issue

The New Mexico SIP is one of three dozen regional haze plans that will be acted on by EPA this year under the terms of a consent decree reached between EPA and environmental organizations in regional haze litigation (*National Parks Conservation Association v. Lisa Jackson*). The environmental groups brought the litigation because the states and the EPA are far behind schedule in developing implementation plans for regional haze, which were supposed to have been completed by 2008.

Under the Nov. 9, 2011 consent decree, EPA must now issue a multitude of decisions approving or disapproving state plans by the end of 2012. Where EPA disapproves a SIP, it must institute a FIP

instead. EPA's response to some of these SIPs has raised the same issues and questions associated with EPA's approach to enforcement of regional haze regulations at the San Juan Generating Station in New Mexico. Last December, a federal court supported North Dakota's decision to use the less-expensive SNCR technology at several power plants rather than the far more costly SCR controls sought by EPA. The decision (*United States of America and State of North Dakota v. Minnkota Power Cooperative, Inc. and Square Butte Electric Cooperative)* affirmed that states have the primary role in making BART determinations. Legislation (H.R. 3379) introduced in the House last year would mandate that states have sole discretion, after considering certain economic factors, in determining emission limits, schedules of compliance, and other measures for each applicable implementation plan for a state for any area that is listed as contributing to impairment of visibility.

Conclusion

The California public agencies that have an ownership interest in the San Juan Generating Station are willing to do their share to ensure cleaner air and improved visibility with cost-effective improvements that are intended to bring the plant into compliance with Clean Air Act standards. That is why we support the New Mexico SIP. But our ratepayers – ordinary households and businesses – should not be required to pay for extremely costly emissions controls that produce only marginal benefits as compared to less costly but similarly effective alternatives. The environmental organizations that support such costly improvements do not hide the fact that their goal is to shut down plants such as the San Juan Generating Station. Closure of the San Juan Generating Station is the clear purpose of the NRDC and Sierra Club effort to enjoin the California owners from fulfilling their contractual obligations to help pay for regional haze improvements at the San Juan Station.

Thank you for your attention. I am happy to answer any questions that you may have.

ATTACHMENTS:

M-S-R Public Power Agency white paper on Reliability Impacts of San Juan Station Shut-Down

Comparison photos of visibility improvements

CHART- Status of Regional Haze SIPs

Reps. Denham-Cardoza Letter to EPA re SJGS FIP

Rep. Filner Letter to EPA re SJGS FIP

Reps. Lewis-Bono-Mack Letter to EPA re SJGS

EPA Letter to Rep. Bono Mack re SJGS FIP

Sierra Club-NRDC Petition to CA Energy Commission

WEST Associates Letter to EPA on regional haze

M-S-R Public Power Agency

San Juan Generating Station
System Reliability Impacts
March 2012

M-S-R Public Power Agency

- M-S-R Public Power Agency is composed of three public power utilities in Central California; Modesto Irrigation District, City of Santa Clara, and City of Redding

- M-S-R Public Power Agency employs a mix of renewable and thermal generation resources to provide electricity to 210,000 residential and commercial customers in a three-county area.

San Juan Generating Station (SJGS)

- The San Juan Generating Station (SJGS) is a four-unit 1680 MW thermal-electric coal-fired power plant located near Farmington, NM.

- M-S-R owns a 28.8-percent undivided interest in Unit No. 4 of the SJGS, which provides 150 MW annually to M-S-R's California customers.

EPA Regional Haze Federal Implementation Plan (FIP)

- In August 2011 EPA issued a Federal Implementation Plan (FIP) for the SJGS requiring installation of additional pollution controls intended to reduce emissions that contribute to regional haze. In June 2011 the New Mexico Environmental Department issued a far less burdensome yet equally effective State Implementation Plan (SIP) – that has not been acted on by EPA.

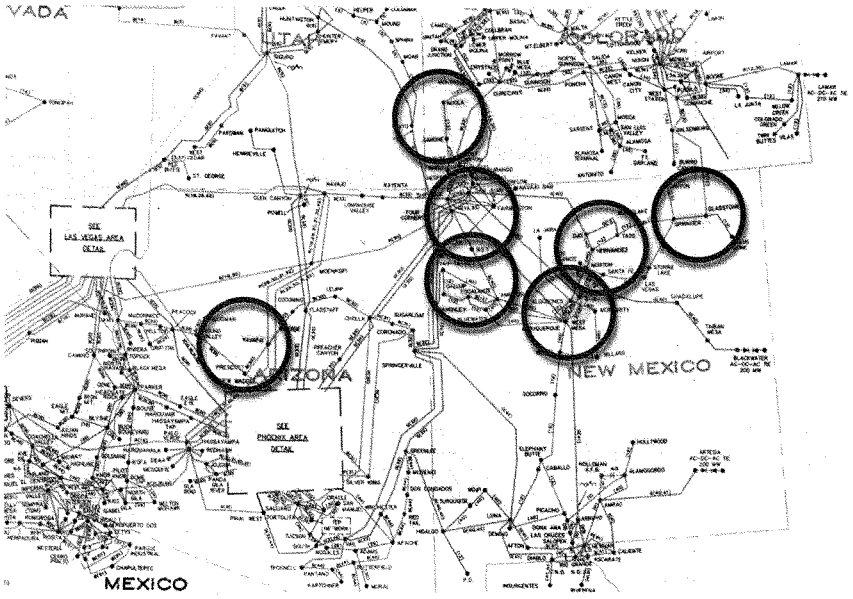
- EPA's regional haze rule ignores electric grid reliability impacts. Federal Energy Regulatory Commissioner Moeller testified before Congress September 14, 2011 "the federal government needs to convene an open and transparent process to assess the reliability implications of the EPA rules individually and in aggregate."

- M-S-R identified potential electric grid reliability impacts resulting from EPA's rule in comments (November 28, 2011) and supplemental comments (December 9, 2011) filed before FERC in AD-12-1-000 and has confirmed those concerns in recent powerflow studies.

Reliability Impacts (Detailed Report Attached)

- Shutdown of SJGS would result in significant transmission system impacts.
  - New post-contingency overloads in northern AZ, northern NM and southwestern CO.
  - Increases in the number and/or severity of the post-contingency overloads in northeastern NM and interconnections with southern CO and northeastern NM.
  - Post-contingency voltage deviations in northern NM.
  - Potential voltage instability indicated.

Locations of Impacted Transmission Facilities:



Contact:

Martin R. Hopper, General Manager
(408) 307-0512
mhopper@msrpower.org
M-S-R Public Power Agency
1231 Eleventh Street
Modesto, CA 95352

REPORT ON THE PRELIMINARY ASSESSMENT OF THE IMPACTS IF SAN JUAN UNITS 1-4 WERE OFF-LINE DURING THE 2015-2016 TIME FRAME

EXECUTIVE SUMMARY

The M-S-R Public Power Agency (M-S-R) presently owns 28.8% (approximately 146 MW) of capacity in the 507 MW Unit 4 at the San Juan Generating Station (San Juan), which is located in northwestern New Mexico. San Juan consists of four units with a total capacity of 1,684 MW. The United States Environmental Protection Agency has stated that all four units at San Juan need to be retrofitted to meet new emissions standards. Due to the anticipated costs for the potential retrofits and the timing to accomplish such, M-S-R has asked that Navigant Consulting, Inc. (Navigant) undertake a preliminary assessment of the potential impacts on the transmission system in the Study Area (i.e. Arizona, New Mexico, the El Paso area of Texas, southwestern Colorado, and southeastern Utah) if the San Juan units were out-of-service in the 2015-2016 timeframe.

This preliminary assessment (which is discussed in greater detail below) assumed that:

- The existing coal-fired generation at Apache Units 1 and 2, Cholla Units 1-3, Coronado Units 1 and 2, Escalante Unit 1, Four Corners Units 4 and 5, Navajo Units 1-3, and Springerville Units 1-4 (a total of approximately 7,300 MW of capacity) would remain in service, and
- Based on the modeling in the selected WECC powerflow case, enough "underutilized" gas-fired generation located in Arizona and California would be available to replace and coal-fired generation that was modeled as retired or off-line in the studies. A majority of such generation is "non-utility" owned.

This preliminary assessment (which included powerflow analyses only) indicated that operating the system with the San Juan generation off-line could:

- Result in new post-contingency overloads (of as high as 6%) on existing 230-kV and 115-kV lines in northern Arizona, northern New Mexico and southwestern Colorado.
- Increase the number and/or severity of the post-contingency overloads noted on two 115-kV lines in northeastern New Mexico which are interconnected with the existing 230-kV line between the Walsenburg Substation in southern Colorado and the Gladstone substation in northeastern New Mexico.
- Result in post-contingency voltage deviations of as high as 13% at the Ojo 345-kV bus in northern New Mexico. It is possible that such large voltage deviations could be an indication of potential system in-stability. Determining if such was, in fact, the case would require the performance of transient stability studies.

DETAILED DISCUSSION

The preliminary assessment for analyzing the potential impacts if the four units at San Juan were out-of-service during the 2015-2016 time frame consisted of six steps; as follows:

1. Reviewing the latest available WECC summer peak base cases for the 2015-2016 timeframe to select one of the cases for use in the assessment.
2. Modifying the selected case to create a "Reference Case" that reflected the latest publically available information regarding the status of proposed generation and transmission facilities within the Arizona/New Mexico area.
3. Modifying the Reference Case developed as above to create a "Four Corners Retirement Case" which reflected the retirement of Four Corners Units 1-3 that are owned by Arizona Public Service (APS), the "transfer" of the capacity in Four Corners Units 4 and 5 presently owned by Southern California Edison (SCE) to APS, and adjusting thermal generation in the APS and SCE areas to reflect the results of these actions.
4. Modifying the Four Corners Retirement Case as developed above to create a "San Juan Off-Line Case" which reflected taking San Juan Units 1-4 off-line and replacing the "lost" capacity with existing thermal generation in Northern New Mexico, Arizona, California, southern Colorado, and southern Utah as discussed in greater detail below.
5. Comparing the pre- and post-Category B contingency line and transformer loadings and bus voltages within the Study Area for each of the three Cases discussed above and summarizing and comparing the results. The Category B contingencies simulated on each of the three Cases included all 500-kV and 345-kV lines and transformers within the Study Area.
6. Documenting the results of the above analyses in this report.

Development of Reference Case

The initial step in the development of the Reference Case for use in this assessment consisted of reviewing the WECC 2015HS2A powerflow case (approved by WECC in May 2010) and the WECC 2016HS2 powerflow case (approved by WECC in September 2010) to ascertain which case would be most appropriate for these studies. This review indicated that the 2015 case would be the best to use for these studies and, as a result, it was selected for use in developing the Reference Case.

Table 1 summarizes the loads and generation (on a "company-by-company" basis) and losses (on a sub-area basis) modeled in the Arizona/New Mexico/El Paso area in the WECC 2015 summer peak case. As shown in Table 1, the total generation in this combined area is approximately 6,300 MW greater than the loads and losses in the area. It should also be noted that the amounts of generation in Table 1 include:

- Approximately 3,300 MW of generation from the jointly-owned plants in the area that is owned by parties outside of the area, and
- Approximately 7,200 MW of generation owned by independent power producers (IPP's).

TABLE 1
LOADS, LOSSES, AND GENERATION MODELED IN ARIZONA/NEW MEXICO/EL PASO AREAS IN WECC 2015 CASE

Company	Load (MW)	Losses (MW	Total (MW)	Generation (MW)
Arizona Public Service	8,883	-----	-----	13,098
Salt River Project	7,751	-----	-----	8,626
Tucson Electric Power	2,593	-----	-----	2,586
Unisource	519	-----	-----	0
Arizona Electric Power Coop	460	-----	-----	527
Western Area Power	931	-----	-----	3,945
Total – Arizona	21,137	608	21,745	28,782
Public Service of New Mexico	2,261	-----	-----	2,655
Tri-State G&T Cooperative	428	-----	-----	240
Total – No. New Mexico	2,689	164	2,853	2,895
El Paso Electric Area	1,944	64	2,008	1,279
Total Study Area	25,770	836	26,606	32,956

Table 2 presents additional information regarding the generation mix for those utility systems with which jointly owned projects or IPP projects are interconnected. As noted in Table 2, the IPP generation includes 1,200 MW from the proposed Desert Rock Powerplant in the Four Corners area and 500 MW from the proposed Bowie power project in southeastern Arizona. All of the remaining 5,500 MW of IPP generation listed in Table 2 is from existing projects (primarily in the Palo Verde area).

TABLE 2
GENERATION MIX IN ARIZONA/NEW MEXICO/EL PASO AREAS IN WECC 2015 CASE

Utility System	Resources	Generation (Net MW)		
		Available	Dispatched	"Excess"
APS	Self-Owned	4,975	4,975	0
	Four Corners 4 & 5	1,500	1,500	0
	Palo Verde 1-3	3,936	3,936	0
	IPP Projects [1]	3,352	2,687	665
	Total	13,763	13,098	665
SRP	Self-Owned	3,516	3,416	100
	Navajo 1-3	2,243	2,243	0
	IPP Projects	2,968	2,968	0
	Total	8,727	8,627	100
TEP	Self-Owned	1,359	1,271	88

[1] Includes 1,200 MW from the proposed Desert Rock Powerplant in the Four Corners area

	Springerville 3 & 4 [2]	815	815	0
	IPP Projects [3]	500	500	0
	Total	2,674	2,586	88
WAPA-DSW	Self-Owned	2,866	2,866	0
	IPP Projects	1,079	1,079	0
	Total	3,945	3,945	0
PNM	Self-Owned	1,394	1,112	282
	San Juan 1-4	1,607	1,543	64
	Total	3,001	2,655	346

The Reference Case for use in these studies was created from the WECC 2015 summer peak discussed above and reflected the following changes:

- Removing the Desert Rock and Bowie projects from the case because neither of these projects have completed their regulatory review and/or not anticipated to be in-service prior to 2018 (based on information in the WECC ***2011 Power Supply Assessment*** (November 17, 2011).
- Increasing generation as follows to replace the 1,700 MW of "lost" generation[4]:
  - 60 MW from San Juan (which increased the dispatched capacity to a level closer to the available capacity)
  - 665 MW from the Gila River IPP project in Arizona,
  - 315 MW from utility owned plants in the SRP and TEP areas,
  - 100 MW from thermal plants in the San Diego area, and
  - 500 MW from thermal plants in the SCE area.

Four Corners "Retirement" Case

Case Development

The Four Corners "Retirement" Case was developed from the Reference Case discussed above by:

- Retiring Four Corners Units 1-3 that are owned by APS and which were modeled in the Reference Case with a combined output of 560 MW.
- Reducing power transfers from the Arizona area to the SCE area by 720 MW[5] to model the "transfer" of SCE's capacity in Four Corners Units 4 and 5 to APS.
- Increasing thermal generation within the SCE area by 720 MW to replace the capacity from Four Corners 4 and 5 and decreasing APS peaking capacity in the Phoenix area to accommodate the 160 MW of additional generation from Four Corners made available to APS via the "transaction" with SCE.

Results of Technical Studies

---

[2] Units owned by Tri-State and SRP

[3] Includes 500 MW from the proposed Bowie power project in southeastern Arizona

[4] Due to a decrease in losses the total generation added was approximately 60 MW less than the total generation removed

[5] The Reference Case modeled the total generation from these two units at 1,500 MW; SCE's ownership share (48%) is equal 720 MW

Category B outages of the 345-kV and 500-kV lines and transformers in the Study Area were simulated on both the Reference Case and the Four Corners "Retirement" Case to assess the impacts associated with retiring and re-allocating generation at Four Corners. In summary, these studies indicated that retiring and re-allocating generation at Four Corners:

- Would result in "new" overloads of:
  - About 14% on either of the 345/230-kV transformers at Four Corners.
  - About 8% on the Enron Tap-Gallup 115-kV line in northern New Mexico
- Would increase the number and/or severity of overloads on the following elements:
  - Gladstone-Clapham 115-kV line in northeastern New Mexico – 3% increase in overload
  - Gladstone-Springer 115-kV line in northeastern New Mexico – number of overloads increases from eight to seventeen and the worst overload increases by 4%
  - Hernandez-Norton 115-kV lines in the PNM area – Overloads increase by 2%
  - McKinley-Yahtahey 345/115-kV transformer - Number of overloads increases from one to two and the worst overload increases by 4%
- Would not increase the magnitude of post-outage voltage deviations at the major busses in the study area.

San Juan "Off-Line" Case

Case Development

The San Juan "Off-Line" Case was developed from the Reference Case discussed above by:

- Taking San Juan Units 1-4 (modeled in the Four Corners Retirement Case with a total net capacity of 1,614 MW) off-line.[6]
- Replacing approximately 570 MW of the "lost" capacity with existing, underutilized utility-owned thermal generation within the service areas of the San Juan participants, as follows:
  - Increasing thermal generation in southern Colorado by 40 MW to replace Tri-State's share of San Juan capacity.
  - Increasing thermal generation in Utah by 35 MW to replace UAMP's share of San Juan capacity.
  - Increasing thermal generation in the SCE area by 130 MW to replace the San Juan capacity owned by the municipal utilities within the SCE area (Anaheim, Azusa, Banning, and Colton).
  - Increasing thermal generation in the LADWP area by 20 MW to replace Glendale's share of the San Juan capacity.
  - Increasing thermal generation in the IID area by 104 MW to replace IID's share of the San Juan capacity.
  - Increasing thermal generation in the M-S-R member systems by 144 MW to replace M-S-R's share of the San Juan capacity.
  - Turning on approximately 100 MW of previously unused generation in the PNM area.
- Utilizing the capacity from IPP projects in Arizona which had previously been assumed to be scheduled to California to replace the remaining approximately 1,050 MW of lost

[6] The total gross capacity of San Juan Units 1-4 modeled in the Four Corners Retirement Case was 1,791 MW and the total station service load for these four units was modeled as 177 MW

generation. This was accomplished by:

- Turning on approximately 50 MW of previously unused thermal capacity in the SCE area, and
- Turning on approximately 160 MW of previously unused thermal capacity in the San Diego area, and
- Turning on approximately 840 MW of previously unused thermal capacity in the PG&E area (such was necessary because there was no additional, unscheduled thermal capacity in the SCE or SDG&E areas).

Results of Technical Studies

Category B outages of the 345-kV and 500-kV lines and transformers in the Study Area were simulated on the San Juan "Off-Line" Case and compared to the results for the Four Corners "Retirement" Case to assess the impacts if the four units at San Juan were off-line. In summary, these studies indicated that taking San Juan off-line:

- Would result in "new" overloads of:
  - As high as 6% on APS's Verde-Yavapai 230-kV line
  - As high as 4% on the Person-Prosperity 115-kV line in the PNM area
  - As high as 2% on the Prosperity-Kirtland 115-kV line in the PNM area
  - As high as 2% on the Nucla-Cahone 115-kV line in southern Colorado.
- Would increase the number and/or severity of overloads on the following elements:
  - Gladstone-Clapham 115-kV line – Number of overloads increases from one to two and the worst overload increases by 2%
  - Gladstone-Springer 115-kV line – Number of overloads does not increase but the magnitude of the worst overload increases by 7%
- Would result in the post-outage voltage deviation at the Ojo 345-kV bus in northern New Mexico increasing by about 4% (from about 9% to about 13%).

Visual Difference Between
New Mexico State Implementation Plan and
EPA Federal Implementation Plan

New Mexico State Implementation Plan costs = $77 million with result of ~5.89 delta dv.

Federal Implementation Plan costs = $750-850 million with a result of ~3.45 delta dv.

Status of Regional Haze SIP Decisions in EPA Regions

Washington
- Proposed EPA Action due May 15, 2012

Montana
- EPA Proposed FIP March 20, 2012 (MT delegated program)

North Dakota
- EPA Approved SIP on March 2, 2012

Oregon
- EPA approved SIP in part on July 5, 2011
- Remaining elements due Nov 15, 2012

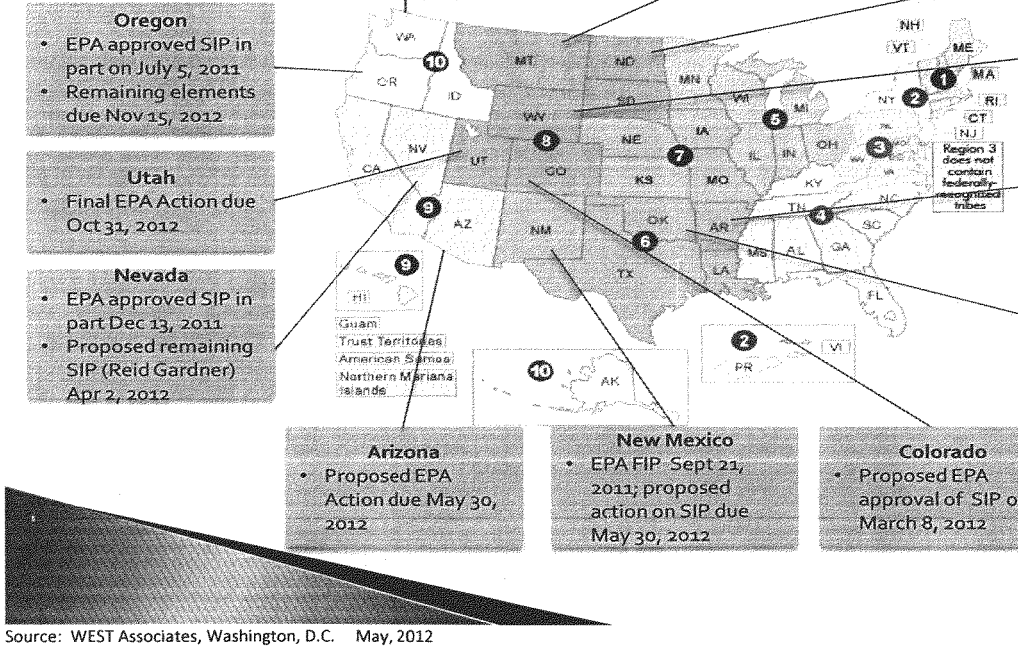
Wyoming
- EPA partial approval proposed May 15, 2012

Utah
- Final EPA Action due Oct 31, 2012

Arkansas
- Final partial approval of SIP March 12, 2012

Nevada
- EPA approved SIP in part Dec 13, 2011
- Proposed remaining SIP (Reid Gardner) Apr 2, 2012

Oklahoma
- Final partial EPA Action Dec 2011
- Remaining elements due May 15, 2012



Arizona
- Proposed EPA Action due May 30, 2012

New Mexico
- EPA FIP Sept 21, 2011; proposed action on SIP due May 30, 2012

Colorado
- Proposed EPA approval of SIP on March 8, 2012

Source: WEST Associates, Washington, D.C. May, 2012

Congress of the United States
Washington, DC 20515

November 18, 2011

The Honorable Lisa Jackson
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Dear Administrator Jackson:

As U.S. Representatives of a consumer-owned utility that is a partial owner of the San Juan Generating Station (SJGS) in New Mexico, we respectfully request your assistance in meeting federal EPA Regional Haze requirements with the most cost-effective technology described below.

The M-S-R Public Power Agency in California is jointly owned by the Modesto Irrigation District, serving the City of Modesto and portions of Stanislaus and San Joaquin Counties, and the municipal utilities serving the Cities of Santa Clara and Redding. The M-S-R constituent members collectively own 28.8 percent of the SJGS Unit 4. All of these consumer-owned utilities actively support efforts to meet federal EPA Regional Haze requirements. All are making significant and costly investments to meet state energy requirements, including a 30-percent reduction in Greenhouse Gas (GHG) emissions (80 percent by the year 2050) and a 33-percent renewable energy standard by the year 2020.

On June 2, 2011, New Mexico's Environment Department unanimously approved a State Implementation Plan (SIP) to retrofit SJGS with Selective Non-Catalytic Reduction technology (SNCR) to reduce regional haze and meet federal air quality goals. The SNCR option achieves EPA's established presumptive NOx limit, reduces NOx that contributes to haze by an additional 4,900 tons per year and also results in visibility improvements. The plan meets Clean Air Act standards and has an estimated capital installation cost of $74 million.

We understand, prior to the SIP's being approved by the State of New Mexico, U.S.-EPA Region 6 issued its own Federal Implementation Plan (FIP) to meet the same federal air quality goals and subsequently published the same in the Federal Register. The federal plan calls for the installation of Selective Catalytic Reduction (SCR) technology, at a cost of more than $779 million. SCR technology would remove a greater amount of the NOx pollutant; however, the visibility improvement gained is minimal as compared to the New Mexico plan.

M-S-R Public Power Agency and its public power partners, who are charged with the delivery of affordable, reliable energy to their customers, are already making enormous environmental strides as required under California law. The added layer of EPA's SCR requirement at SJGS would be fiscally painful, with each of the M-S-R Public Power Agency constituent member's 210,000 customers obligated to pay up to $660 each for their utility's financed share of the SCR retrofit. This additional cost would be a hard pill to swallow for residents of California's Central Valley, which has some of the highest levels of unemployment in the State.

Before your agency requires a technology that is roughly 13 times the cost of the SNCR and produces minimal visibility improvement, we respectfully request careful consideration of the technical, as well as consumer impacts when analyzing the two options. Further, we note that on August 1, 2011, your Assistant Administrator for Air and Radiation informed my colleagues, the Honorable Mary Bono Mack, the Honorable Gary G. Miller, and the Honorable Joe Baca, that EPA would "fully consider the information in the New Mexico SIP, and take appropriate action."

We respectfully request your assistance with this important matter and that EPA withdraws its FIP; while, pursuant to Section 101 of the Clean Air Act, EPA looks to approve the New Mexico SIP including both its Interstate Transport and Regional Haze components.

Sincerely,

JEFF DENHAM
U.S. Representative

DENNIS CARDOZA
U.S. Representative

BOB FILNER
51ST DISTRICT, CALIFORNIA

VETERANS' AFFAIRS COMMITTEE
RANKING MEMBER

TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
AVIATION
HIGHWAY AND TRANSIT
WATER RESOURCES AND ENVIRONMENT
ECONOMIC DEVELOPMENT, PUBLIC BUILDINGS, AND EMERGENCY MANAGEMENT

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES

2428 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
TEL: (202) 225-8045
FAX: (202) 225-9073

333 F STREET, SUITE A
CHULA VISTA, CALIFORNIA 91910
TEL: (619) 422-5963
FAX: (619) 422-7290

1101 AIRPORT ROAD, SUITE D
IMPERIAL, CALIFORNIA 92251
TEL: (760) 355-8800
FAX: (760) 355-8802

website: www.house.gov/filner

June 13, 2011

The Honorable Lisa Jackson
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue N.W.
Washington, DC 20460

Dear Administrator Jackson:

As a U.S. Representative of a consumer-owned utility that is a partial owner of the San Juan Generating Station (SJGS) in New Mexico, I respectfully request your assistance with regard to federal EPA Regional Haze requirements.

The Imperial Irrigation District (IID), which provides electricity to my California Congressional District, together with the municipal utilities serving the Cities of Azusa, Banning, Colton, and Glendale, collectively own 42 percent of the SJGS Unit 3 through the Southern California Public Power Authority. The City of Anaheim's utility owns 10 percent of Unit 4, directly. All of these consumer-owned utilities actively support efforts to meet federal EPA Regional Haze requirements. All are making significant and costly investments to meet state energy requirements, including a 30 percent reduction in Greenhouse Gas (GHG) emissions (80 percent by 2050) and a 33 percent renewable energy standard by 2020.

On June 2, New Mexico's Environment Department unanimously approved a State Implementation Plan (SIP) to retrofit SJGS with Selective Non-Catalytic Reduction technology (SNCR) to reduce regional haze and meet federal air quality goals. The SNCR option achieves EPA's established presumptive NOx limit, reduces NOx which contributes to haze by an additional 4,900 tons per year and also results in visibility improvements. Its capital installation cost is approximately $70 million, and meets EPA standards.

I understand, prior to the SIP's being approved by the State of New Mexico, U.S. EPA Region 6 issued its own Federal Implementation Plan (FIP) to meet the same federal air quality goals. The federal plan calls for the installation of Selective Catalytic Reduction (SCR) technology, at a cost of more than $900 million. SCR technology would remove a greater amount of the NOx pollutant; however, the visibility improvement gained is minimal.

IID and its public power partners, who are charged with the delivery of affordable, reliable energy to their customers, are already making enormous environmental strides as required under state law. The added layer of EPA's SCR requirement at SJGS would be fiscally painful, with each of the IID's 140,000 customers obligated to pay $850 each for the utility's financed share of the SCR retrofit. A bill this size would be a hard pill to swallow for residents in the Imperial

County, which has some of the highest levels of unemployment in the State. Other California customers would pay as much as $2,250 each.

Before your agency requires a technology that is roughly 13 times the cost of the SNCR and produces minimal visibility improvement, I respectfully request careful consideration of the technical, as well as consumer impacts when analyzing the two options. Further, I hope that EPA will share with me its assessment, prior to release of a final decision affecting our constituents and their investment in SJGS.

Sincerely,

BOB FILNER
Member of Congress

BF/ek
2581566

Congress of the United States
Washington, DC 20515

June 3, 2011

The Honorable Lisa Jackson
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue NW
Washington, DC 20004

Dear Administrator Jackson:

As U.S. Representatives of municipal utilities and local officials who are stakeholders and owners of the San Juan Generating Station (SJGS) in New Mexico, we respectfully request your assistance in moving forward with the most cost effective technology to reduce regional haze related to generation from the plant.

The California utilities run by the Cities of Azusa, Banning, Colton, Glendale, and the Imperial Irrigation District, collectively own 42 percent of the SJGS Unit 3 (through the Southern California Public Power Authority). The City of Anaheim's utility owns 10 percent of Unit 4, directly. All of these consumer-owned utilities actively support efforts to meet federal EPA Regional Haze requirements. These same constituents are on track to make significant and costly strides to achieving state energy requirements, including a reduction in Greenhouse Gas (GHG) emissions by 30 percent (80 percent by 2050) and meeting a 33 percent renewable energy standard by 2020.

On February 28, New Mexico's Environment Department filed a State Implementation Plan (SIP) to retrofit SJGS with Selective Non-Catalytic Reduction technology (SNCR) to reduce regional haze and meet federal air quality goals. Prior to the SIP being filed, U.S. EPA Region 6 issued its own Federal Implementation Plan (FIP) to meet the same federal air quality goals, which calls for the installation of Selective Catalytic Reduction (SCR) technology.

While the SCR technology, at a cost of more than $900 million, would remove a greater amount of the NOx pollutant which contributes to haze, the visibility improvement gained is minimal. SNCR achieves EPA's established presumptive NOx limit, reduces NOx by an additional 4,900 tons per year and also results in visibility improvements. Thus, SNCR is cost-effective at a capital installation cost of approximately $70 million, while still meeting the EPA standards.

These utilities, which are charged with the delivery of affordable, reliable energy to their customers, are already making enormous strides as required under state law (AB 32), including maximizing energy efficiency, increasing their renewable resources to 33 percent by 2020 and meeting GHG reduction requirements. The added layer of EPA's possible SCR requirement at SJGS would be fiscally painful, with each of our constituents having to pay between $272 to more than $2,250 for their utilities' financed share of the SCR retrofit. Before your agency requires a technology that is roughly 13 times the cost of the SNCR and produces minimal visibility improvement, we would respectfully request careful consideration of the technical, as well as consumer impacts when analyzing the two options.

Again, we respectfully request your assistance with this important matter, and that EPA may share with us your decision prior to release of the final decision affecting our constituents and their investment in SJGS.

Sincerely,

JERRY LEWIS
Member of Congress

MARY BONO MACK
Member of Congress

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG - 1 2011

OFFICE OF
AIR AND RADIATION

The Honorable Mary Bono Mack
U.S. House of Representatives
Washington, D.C. 20515

Dear Congresswoman Bono Mack:

Thank you for your letter of June 3, 2011, co-signed by Congressman Jerry Lewis, requesting that the U.S. Environmental Protection Agency move forward with approval of the most cost effective technology to reduce regional haze-related air pollution from the San Juan Generating Station (SJGS) in New Mexico.

On January 5, 2011, in the absence of an approvable State Implementation Plan (SIP) from New Mexico, we proposed a Federal Implementation Plan (FIP) to address Clean Air Act requirements that emissions from sources in one state do not interfere with the visibility protection programs of other states. In our assessment of New Mexico's sources we found that, with the exception of SJGS, New Mexico's sources are sufficiently controlled with respect to their visibility impacts in other states. For SJGS we proposed specific emission limits to eliminate this source's interference with neighboring states' visibility goals for their national parks and wilderness areas.

As you are aware, we proposed to find that the Best Available Retrofit Technology (BART) to limit emissions of nitrogen oxides (NO_x) from SJGS was selective catalytic reduction (SCR). In proposing this determination, we evaluated all NO_x reduction technologies, including selective non-catalytic reduction (SNCR). We also evaluated the visibility improvement that could be expected to result from the installation of SCR, SNCR and other NO_x control technologies.

Our analyses found that in terms of the amount of NO_x reduced relative to the cost of control, SCR was very cost effective. Other technologies that we evaluated, including SNCR, were less expensive, but did not result in significant visibility improvement. The EPA's proposed estimate of the cost of SCR on all four units at SJGS is well within the range that other states and the EPA have found cost effective as a basis for selection of SCR as BART. We are evaluating comments we received concerning our cost evaluation which may cause us to modify it in our final action.

We are aware of the concerns of the numerous utilities that own an interest in SJGS. Our Region 6 staff has met with management of the facility a number of times to discuss their concerns and I have spoken with them as well. We also appreciate PNM hosting the EPA Region 6 staff on a tour of the facility on May 19, 2011. In response to a request for more time, we also extended our public comment period so

all opinions on our FIP could be voiced. Most recently, members of my staff and staff from the EPA's Region 6 and Region 9 offices participated in a conference call with staff from your offices and several of your colleagues' offices to discuss the FIP proposal for SJGS.

We received the New Mexico regional haze SIP on June 24, 2011. This SIP submission includes a revised NOx BART evaluation for the SJGS that would rely on SNCR in lieu of SCR. As part of our NOx BART evaluation for the SJGS, we did consider SNCR in our proposal, but rejected it in favor of SCR, which although more expensive, remained cost effective and is predicted to produce significantly more visibility improvement at the 16 Class I areas we examined. However, we will fully consider the information in the New Mexico SIP, and take appropriate action. In the meantime, we are reviewing and responding to the many comments we received during our comment period and public hearing process. We intend to carefully consider these comments as we make a final decision. As part of this review, we will address the disparity between the EPA and PNM cost estimates.

In light of your interest in this action, we will do our best to make you aware of the Agency's final action on this matter before it is announced publicly and published in the Federal Register. Again, thank you for your letter. If you have further questions, please contact me or your staff may call Diann Frantz in the EPA's Office of Congressional and Intergovernmental Relations at (202)-564-3668.

Sincerely,

Gina McCarthy
Assistant Administrator

JOINT PETITION OF THE NATURAL RESOURCES DEFENSE COUNCIL AND THE SIERRA CLUB FOR INITIATION OF A RULEMAKING REGARDING CALIFORNIA'S EMISSIONS PERFORMANCE STANDARD

I. INTRODUCTION

Pursuant to Title 20, Section 1221 of the California Code of Regulation,[1] the Natural Resources Defense Council (NRDC) and Sierra Club jointly file this petition to request the California Energy Commission (CEC) initiate a rulemaking proceeding to ensure that current practices of California publicly-owned utilities (POUs) meet the requirements of Senate Bill 1368 (Perata, Chapter 598, Statutes of 2006) and California's Emissions Performance Standard (EPS). Specifically, NRDC and Sierra Club request the following actions:

(1) modify Section 2907 to require mandatory reporting requirements when POUs make investments in existing coal plants; and

(2) clarify that under current law, POU investments in existing coal plants are subject to the filing requirements of Sections 2908 and 2909.

A review of past and planned expenditures at existing coal power plants owned or contracted to California POUs shows that POUs have made and plan to make substantial capital investments in plants that do not meet the EPS. In light of these past and planned expenditures, we request that the CEC initiate a rulemaking to amend its existing regulations implementing the EPS in order to ensure ongoing transparency and monitoring of any investment at POU-owned and contracted coal plants. As part of this rulemaking, we request that the CEC clearly articulate a set of criteria for POUs to consider in determining whether a particular investment is subject to the requirements of SB 1368 and the EPS.

At this time, NRDC and Sierra Club do not seek to initiate an enforcement action for any particular violation of the EPS. Rather, we request a prospective rulemaking to clarify that POUs fully understand the requirements imposed by the EPS and to ensure that future investments by POUs do not violate existing law. Nothing in this petition constitutes a waiver by NRDC or Sierra Club of their right to request at a later date an enforcement action pursuant to Section 2911 for past or future violations of the EPS.

II. BACKGROUND

[1] Unless otherwise stated, all further references to code sections refer to the Energy Commission's regulations under Title 20 of the California Code of Regulations.

SB 1368 was signed into law on September 29, 2006. The law requires the California Public Utilities Commission (CPUC) and the CEC to establish a greenhouse gas emissions performance standard and to implement regulations for all long-term financial commitments in baseload generation made by load serving entities (LSEs) and POUs, respectively. The CPUC adopted its regulations for the investor-owned utilities (IOUs) and other LSEs in January, 2007. The CEC adopted EPS regulations for POUs in October 2007.[2]

The regulations implemented by the CPUC and CEC under SB 1368 are expected to result in significant GHG emissions reductions. The greenhouse gas emissions performance standard is not to exceed the rate of greenhouse gases emitted per megawatt-hour associated with combined-cycle, gas turbine baseload generation. The CEC's regulations establish an emissions performance standard of 1,100 pounds (0.5 metric tons) of carbon dioxide per megawatt hour of electricity. This standard was established in consultation with the CPUC and the California Air Resources Board and is the same standard adopted by the CPUC.

The objectives of the EPS regulations are to avoid new long-term investments in highly polluting power generation to minimize the significant and under-recognized cost of greenhouse gas emissions, and to reduce potential financial risk to California consumers for future pollution-control costs. The law has two effects: (1) to close off the possibility of California utilities or energy service providers (ESPs) developing or signing new contracts with baseload power plants that do not meet the EPS; and (2) to require California utilities and ESPs to refrain from making any new ownership investments in their existing non-compliant coal plants, unless they can bring those plants into compliance with the EPS.

Since the passage of the California EPS, no California utility has proposed investment in the development or purchase of new coal plants. Utilities appear to clearly understand that the EPS prohibits investments in new coal plants without carbon capture and sequestration because they would not meet the standard. However, past and planned expenditures at existing coal plants suggest that utilities do not properly understand the requirements of the EPS with respect to existing plants.

III. TIMING

Recent and upcoming EPA regulations will require owners of existing coal-fired power plants to decide whether to make significant capital investments in environmental compliance retrofits, or whether to pursue a different strategy that could lead to retirement or natural gas re-powering of coal plants. As discussed in more detail below, all existing coal plants are "non-deemed compliant" facilities under the EPS because their greenhouse gas emissions exceed the standard. Yet California faces the prospect that several POUs will commit hundreds of millions of dollars toward compliance retrofit costs to these facilities. Such investments could significantly extend the effective lives of these plants, contrary to the intent of SB 1368. The CEC's oversight is therefore

[2] 20 CCR 11 § 2900 *et seq.*

necessary to provide a clear and transparent criteria and review of all POU long-term capital investments in coal-fired power plants.

IV. IDENTIFICATION OF PETITIONERS (§ 1221(A)(1))

NRDC is a non-profit membership organization with over 250,000 members and online activists in California and a longstanding interest in minimizing the societal costs of the reliable energy services that Californians demand. Sierra Club is a national, non-profit membership organization with over 600,000 members nationwide, and over 150,000 members in California. Sierra Club's most important priority is to help speed the country's transition from an energy economy dependent on fossil fuels to a robust clean energy economy based on renewable energy.

Noah Long
Natural Resources Defense Council
111 Sutter St. 20th Floor
San Francisco, CA 94104-4540
Phone: (415) 875-6100
nlong@nrdc.org

Travis Ritchie
Sierra Club Environmental Law Program
85 Second Street, 2nd Floor
San Francisco, CA 94105
Phone: 415-977-5727
travis.ritchie@sierraclub.org

V. NATURE OF EXISTING EPS REQUIREMENTS FOR INVESTMENTS IN EXISTING FACILITIES (§ 1221(A)(2))

The CPUC monitors proposed investments in non-compliant facilities by California's IOUs. Last year the CPUC ruled on a petition for modification from Southern California Edison (SCE) regarding SB 1368's applicability to proposed retrofit investments at the Four Corners coal plant in New Mexico.[3] The CPUC's ruling explicitly limited new long term investments by SCE in the plant. The ruling provided a clear signal to SCE and other IOUs that California law does not allow further investments in non-compliant facilities.[4]

Similar to the IOUs, various California POUs have significant contractual or ownership stakes in out-of-state coal plants that do not meet the EPS. (See Attachment 2.) However, unlike the CPUC, the CEC does not yet require a transparent review of proposed investments at these coal plants. As a result, it is unclear whether POUs have consistently complied with the EPS, or whether POUs have misinterpreted the applicability of the CEC regulations with respect to investments in existing facilities.

[3] D.10-10-016 October 14, 2010 (R. 06-04-009).

[4] Id.

The prohibition in SB 1368 against further capital investment in coal-fired power plants is clear, providing that:

> No load-serving entity or local publicly owned electric utility may enter into a long-term financial commitment unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (d), for a load-serving entity, or by the CEC, pursuant to subdivision (e), for a local publicly owned electric utility.[5]

Thus far, the CEC has not monitored investments in existing coal-fired power plants that are currently under contract to California POUs, none of which meet the EPS. To this point, **not a single POU has submitted compliance filings for covered procurements at existing power plants**. This lack of transparency is likely the result of a potentially incorrect and non-uniform interpretation by POUs of the compliance requirements established by the CEC.

The CEC's EPS regulation, at 20 CCR 11 § 2907, allows a POU to request CEC review of proposed investments or "prospective procurements."[6] POUs must also make compliance filings under 20 CCR 11 § 2908 and 2909 for "covered procurements,"[7] which the regulations define to include "new ownership investments."[8] Notwithstanding these provisions, not a single POU has filed a request for review or a compliance filing for investments in existing coal plants.[9] These omissions presumably stem from unilateral determinations made by POUs that such investments are not "prospective procurements" or "covered procurements" and therefore are not subject to the CEC's regulations. This interpretation by POUs has potentially led to incorrect and non-uniform interpretations of the definitions of "covered procurement" and "new ownership investment":

> "Covered procurement" means:[10]
> ***(1) A new ownership investment in a baseload generation powerplant***, or
> (2) A new or renewed contract commitment, including a lease, for the procurement of electricity with a term of five years or greater by a local publicly owned electric utility with:
> (A) a baseload generation powerplant, unless the powerplant is deemed compliant, or

---

[5] Cal. PU Code 8341 (a)

[6] 20 CCR 11 § 2907

[7] 20 CCR 11 §2901 (d)

[8] 20 CCR 11 §2901 (j)

[9] CITE (make at least some mention of how we know that)

[10] 20 CCR 11 §2901 (d) (emphasis added)

(B) any generating units added to a deemed-compliant baseload generation powerplant that combined result in an increase of 50 MW or more to the powerplant's rated capacity.

"New ownership investment" means:[11]
(1) Any investments in construction of a new powerplant;
(2) The acquisition of a new or additional ownership interest in an existing non-deemed compliant powerplant previously owned by others;
(3) Any investment in generating units added to a deemed-compliant powerplant, if such generating units result in an increase of 50 MW or more to the powerplant's rated capacity; or
(4) Any investment in an existing, non-deemed compliant powerplant owned in whole or part by a local publicly owned electric utility that:
(A) is designed and intended to extend the life of one or more generating units by five years or more, not including routine maintenance;
(B) results in an increase in the rated capacity of the powerplant, not including routine maintenance; or
(C) is designed and intended to convert a non-baseload generation powerplant to a baseload generation powerplant.

The CEC's EPS compliance requirements apply to "covered procurements," which in turn incorporates the term "new ownership investments." While "new ownership investments" clearly include construction of new powerplants, POUs appear to have interpreted the term to exclude various types of investments in existing coal facilities. For example, the Southern California Public Power Authority (SCPPA) issued a resolution in 2009 finding that a proposed investment in the San Juan Generating Station "constitutes routine maintenance and is not a 'Covered Procurement' pursuant to the regulations promulgated by the California CEC…pursuant to SB 1368."[12] While we make no judgment at this time on SCPPA's determination regarding the applicability of SB 1368 to that particular investment, it is an example of the type of non-uniform and *ad hoc* interpretation that raises concern.

As discussed further below, NRDC and Sierra Club found ample reason to believe that California POUs have made investments and are considering further significant investments in existing coal plants that do not meet the EPS. Although the POUs may have reason to believe that making, or considering, investments in coal plants are not

[11] 20 CCR 11 §2901 (j)

[12] SCPPA Resolution No. 2009-23, February 19, 2009 (Attachment 3).

"new ownership investments" subject to the EPS, under current practices those determinations are not independent or subject to public scrutiny.

We request that the CEC develop clear criteria for POUs to guide them in determining whether a particular investment in an existing plant is subject to the filing requirements of 20 CCR 11 §§ 2908 and 2909.

We further urge the CEC to amend its reporting and compliance regulations to require the POUs to submit compliance filings for all past[13] and planned investments in plants not meeting the EPS. Such a filing would allow the CEC to publicly, transparently, and consistently review past and planned investments to independently determine compliance with SB 1368 in a manner that individual review by POUs cannot achieve.

VI. A Review of Past and Planned Investments Demonstrates a Need for CEC Rulemaking (§ 1221(a)(3))

A. Existing Ownership Interests

The table included at Attachment 2 identifies the California POUs that have significant interests in out-of-state coal power plants, which do not meet the EPS. During the period after the passage of SB 1368, POUs continued to make substantial capital investments in several coal plants. The following are a few examples of such investments.

1. San Juan Generating Station

The San Juan Generating Station provides a troubling example of continued long-term investments by California POUs in an old and dirty facility that does not meet the EPS.

- In response to a 2005 consent decree, the owners of the San Juan Generating Station began a four-year $340 million pollution upgrade project to bring the plant into compliance with air quality laws for particulate matter, NO_X, and SO_2 emissions.[14] SCPPA alone paid approximately $80 million in capital costs.[15]
- On February 19, 2009, SCCPA authorized the replacement of a high pressure/intermediate pressure turbine for San Juan Generating Station unit 3.[16] At the time SCPPA made its decision to undertake this upgrade, PNM

[13] Commencing with the passage of SB 1368 in September, 2006.

[14] Rebuttal Testimony in Support of Stipulation of Patrick J. Themig, *In the Matter of the Application of Public Service Company of New Mexico for Revision to its Retail Electric Rates, etc.*, April 25, 2011, New Mexico Public Regulation Commission Case No. 10-00086-UT, p.7.

[15] SCPPA San Juan Unit 3 Status Report, July 2008 (Attachment 4).

[16] SCPPA Resolution No. 2009-23, February 19, 2009 (Attachment 3).

estimated the total cost for the turbine at approximately $14.3 million.[17] SCPPA's resolution approving the expenditure concluded that for purposes of SB 1368, the turbine replacement constituted "routine maintenance" and therefore did not violate the emission performance standard. However, there is no CEC guidance or history of enforcement that indicates whether SCPPA's own interpretation of the turbine expense as "routine maintenance" is valid.

- In 2009, SCPPA reported a $7 million advance payment of O&M in the San Juan Project.[18]

2. Intermountain Power Project (IPP)

Over the past several years, the owners of the IPP coal-fired units in Utah made several substantial modifications, including cooling tower additions, high pressure turbine replacements, boiler capacity additions, distributed control system replacement, scrubber outlet modifications and rebuilds, and induced draft fan drive replacement. These modifications have decreased emissions and increased plant efficiency. Importantly for this context, they have also increased the plant's capacity by 140 MW, resulting in a 68 MW increase in available capacity for LADWP.[19]

3. Navajo Generating Station

The Navajo Generating Station completed the installation of scrubbers to remove SOx in all three units of the plant and began to install low-NOx burners to reduce NOx emissions starting with Unit 3 in 2009. Stringent NOx emissions control requirement by the federal government may require Navajo Generating Station to install Selective Catalytic Reduction, which could cost a total of $600 million, or $127 million for LADWP.[20]

The investments described above are just a few examples of ongoing capital investments in non-deemed compliant facilities that California POUs have made after the implementation of SB 1368 and the CEC's EPS regulations. New ownership investments are expressly prohibited by the CEC's regulations, but there is little if any information available to review these procurements. As POUs continue to face significant capital investments at coal-fired generation units due to the aging of the coal fleet as well as new and upcoming regulations, a lack of CEC oversight and enforcement could result in multiple violations of the EPS.

---

[17] SCPPA San Juan Unit 3 Status Report, December 2008 (Attachment 5).

[18] SCPPA, "Independent Auditor's Report and Combined Financial Statements," 2009, at p.4 available at: http://www.scppa.org/Downloads/Annual%20Report/scppa2008_FINAL_FS.pdf.

[19] LADWP, "2010 Power Integrated Resource Plan: Final," p.F-5 (Dec. 15 2010) available at: http://www.ladwp.com/ladwp/cms/ladwp014239.pdf

[20] Id. at p. F-5-6.

B. Planned Investments at Existing Coal Plants Constitute "New Ownership Investments"

The CEC must act quickly to provide guidance to POUs and prevent further investments in coal-fired generating units that may violate California law. POUs face substantial capital investment decisions in the very near term. Based on limited publicly available information, the non-EPS compliant plants have already undergone or are considering significant alterations, expansions and investments involving potential long-term investments from California POUs.

For example, proposed regulations may change the way coal combustion residues are handled and stored at IPP and Navajo generating station.[21] If implemented, the rules would require the phase-out of wet handling systems and surface impoundments of bottom ash and the subsequent permitting and installation of lining under fly ash landfills. The facilities would have to conduct additional groundwater monitoring, and provide closure and post-closure care of the surface impoundments and landfills. California POUs account for 75% of the purchased generation of the Intermountain Power Project in Utah, and LADWP has a contract to receive 21.2% of the Navajo Generating Station output through 2019.[22] These coal plants have faced and will continue to face ongoing capital investment requirements for environmental compliance measures that go far beyond routine maintenance expenditures. Continuing to invest in these plants exposes California consumers to financial risks associated with future compliance costs as well as future reliability risks in electricity supplies. SB 1368 expressly identified the reduction of these risks as a goal of the greenhouse gas EPS.[23]

The San Juan Generating Station provides perhaps the most substantial example of major capital investments that will be required in the near term. On August 5, 2011, EPA announced its final decision to require the installation of Best Available Retrofit Technology (BART) pollution controls on the San Juan Generating Station coal-fired powerplant near Farmington, New Mexico that would include installation of selective catalytic reduction (SCR) technology.[24] EPA estimated that the cost of compliance could reach $345 million,[25] and Public Service Company of New Mexico (PNM), which owns approximately half the plant, estimated the cost of compliance at over $750 million.[26] In either case, the retrofit costs to continue to operate the San Juan Generating Station would be substantial.

---

[21] Id. at p.C-23.

[22] POU contract/ownership status from California Energy Commission, "An Assessment of Resources Adequacy and Resource Plans of Publicly Owned Utilities in California," staff report (Nov. 2009), available at: http://www.energy.ca.gov/2009publications/CEC-200-2009-019/CEC-200-2009-019.PDF

[23] SB 1368 (2006), Sections 1(i)-(j).

[24] EPA Final BART Rule, 40 CFR Part 52, EPA-R06-OAR-2010-0846.

[25] Id.

[26] PNM Press Release, August 5, 2011, available at www.pnm.com/news/2011/0805_epa_decision_bart.htm.

Several California POUs have ownership stakes in the San Juan Generating Station. SCPPA holds a 41.8% ownership interest in Unit 3 on behalf of five of its members: the City of Azusa; the City of Banning; the City of Colton; the City of Glendale; and the Imperial Irrigation District.[27] The MSR joint powers agency[28] owns a 28.7% interest in Unit 4, and the City of Anaheim has a separate 10% ownership interest in Unit 4. Together, these California public entities represent 24.51% of the common ownership interest in the San Juan Generating Station.[29] By contract, capital improvements at the San Juan Generating Station that exceed $5 million require an 82% majority vote of the co-owners.[30] Large capital investments such as the SCR controls therefore require at least one California owner to approve the expenditure. If the California owners do not vote to approve the capital investments in SCR, which is prohibited under California law, then the improvements should not go forward and California owners should not have to pay the costs of those improvements.[31]

Given the ownership structure of the San Juan Generating Station, it is within the discretion of the California owners to decide whether to invest hundreds of millions of dollars in the SCR controls required by EPA's BART determination, or whether to refrain from making new capital investments in the plant. The BART compliance costs are not routine maintenance expenses; the SCR controls are substantial investments designed to extend the legal and functional life of the San Juan Generating Station by bringing its old and dirty coal units into environmental compliance under current law. In accordance with SB 1368, the CEC's greenhouse gas EPS expressly prohibits this type of new ownership investment.[32]

The SCR costs described above are not the extent of future capital investments at San Juan. Other costs include controls to contain coal ash and scrubber waste, compliance with upcoming greenhouse gas cap-and-trade regulations, and potential remediation liability for groundwater contamination. These mounting environmental compliance costs will continue to accrue if California's POUs do not abide by the EPS and cease new ownership investments in these plants.

---

[27] POU contract/ownership status from California Energy Commission, "An Assessment of Resources Adequacy and Resource Plans of Publicly Owned Utilities in California," staff report (Nov. 2009), available at: http://www.energy.ca.gov/2009publications/CEC-200-2009-019/CEC-200-2009-019.PDF.

[28] MSR is a joint powers agency consisting of the City of Santa Clara, the City of Redding, and the Modesto Irrigation District.

[29] Amended and Restated San Juan Project Participation Agreement, § 6.2.6, March 23, 2006 (Attachment 6).

[30] Amended and Restated San Juan Project Participation Agreement, § 18.4.2, March 23, 2006 (Attachment 6).

[31] To the extent that California POUs believe they would be forced by contract obligations to participate in SCR or other major investments even after voting against such investments, § 20 CCR 11 2913 requires those POUs to file a petition with the CEC requesting an exemption.

[32] Title 20, Cal. Code of Regs. §§ 2901(j) and 2902(b).

VII. Basis of CEC Authority (§ 1221(a)(4))

Public Utilities Code section 8341(c) requires the CEC to adopt regulations for the enforcement of SB 1368 with respect to a POU to establish a greenhouse gas emissions performance standard and to implement regulations for all long-term financial commitments in baseload generation made by POUs. The CEC adopted EPS regulations for POUs in October 2007.[33] Public Resources Code section 25213 provides that the CEC shall adopt rules and regulations as necessary. The CEC has the authority to initiate a rulemaking to amend its current regulations as requested by this petition because such amendment is necessary to clarify that existing law prohibits POUs from making capital investments in existing coal plants.

VIII. Petition Request 1: The CEC Should Develop Criteria to Determine Whether a Particular Investment in an Existing Coal Plant Constitutes a Covered Procurement

CEC action is necessary to provide guidance to the California POUs that retain an interest in coal plants to ensure their investment decisions comply with California law. The POUs have interpreted current regulations in a manner that allows them to effectively "self-regulate" by making unilateral determinations on the applicability of the EPS to any given investment. In order to ensure a more consistent and transparent process for evaluating potential investments at POU-owned coal plants, the CEC must develop clear criteria to evaluate whether an investment constitutes a covered procurement under the EPS. These criteria should be added to the existing implementation regulations and should supersede the existing structure for determining "covered procurements." It is incumbent upon the CEC to monitor and enforce compliance with the EPS if any POU makes unlawful capital investments in non-deemed compliant facilities.

IX. Petition Request 2: The CEC Should Amend the EPS Regulation to Require Monitoring and Approval of All Past and Proposed Investments

The various investments that some POUs have made in coal plants since passage of the EPS, as well as the various investments being considered in light of EPA's pending regulations, lead us to conclude that the goal of SB 1368 -to phase out California investments in coal- will be undermined unless there is a more clear and transparent process to evaluate proposed investments. The CEC should amend its rule to require POUs to disclose and file information on any proposed investment in a non-EPS compliant facility. We have provided recommended language for such a reporting requirement in Attachment 1.

[33] 20 CCR 11 § 2900 *et seq.*

X. CONCLUSION

For the forgoing reasons, we request the CEC:

1) Amend 20 CCR 11 §2907 as recommended in Appendix 1, below.

2) Develop clear criteria for the evaluation of investments at existing coal plants for compliance with the EPS.

Attachment 1

Reporting requirement recommended language:

(Criteria for evaluation of covered procurements should be added as a new section and is not included here.)

§2907 ~~Request for~~ Commission Evaluation of a ~~Prospective~~ Procurement and Investments

(a) A local publicly owned electric utility ~~may~~ must, at least 90 days prior to any planned investment or procurement, or by January 1, 2012 for past investments, provide complete documentation for ~~that~~ the Commission to evaluate ~~a prospective~~ procurements or investment at any facility emitting more than 1100 lbs/MWhr ~~for any of the following:~~

~~(1) a determination as to whether a prospective procurement would extend the life of a power plant by 5 years;~~

~~(2) a determination as to whether a prospective procurement would constitute routine maintenance; or~~

~~(3) a determination as to whether a prospective procurement would be in compliance with the EPS.~~

(b) ~~A request for e~~Evaluation of proposed and past investments under this section shall be treated by the Commission as a request for investigation under Chapter 2, Article 4 of the Commission's regulations.

Attachment 2

Table: Out-of-State Coal Plants Owned by California POUs

Generating Station	Location	Nameplate Capacity (MW)[i]	Unit #	CA Owner	CA Owner's Share (%)[2ii]	Dependable Capacity (MW)	Expected End of Ownership
Boardman	Boardman, OR	601	1	SDG&E	15.0%	89	12/31/2013[iii]
				Turlock	8.5%	56	12/31/2018
Intermountain	Delta, UT	1640	1, 2	LADWP	48.6%[iv]	875	6/15/2027[v]
				Glendale	1.7%[vi]	38	6/15/2027
				Pasadena	4.4%[vii]	108	6/15/2027[viii]
				Burbank	3.4%[ix]	60	6/15/2027
				Riverside	7.6%	37	6/15/2027
				Anaheim	13.2%	236	6/15/2027
Navajo	Page, AZ	2406	1,2,3	LADWP	21.2%[x]	477	12/31/2019
Reid Gardner	Moapa, NV	295	4	CADWR	67.8%[xi]	200	2013
San Juan	San Juan, NM	555	3	SCCPA[xii]	41.8%	232	10/31/2030
		555	4	MSR[xiii]	28.7%	160	10/31/2030
				City of Anaheim	10.0%	50	10/31/2030

[i] All capacity data from EIA's "Existing Electrical Generating Units by Energy Source, 2008" (preliminary data); available at: http://www.eia.doe.gov/cneaf/electricity/page/capacity/existingunitsbs2008.xls.

[ii] POU contract/ownership status from California Energy Commission, "An Assessment of Resources Adequacy and Resource Plans of Publicly Owned Utilities in California," staff report (Nov. 2009), available at: http://www.energy.ca.gov/2009publications/CEC-200-2009-019/CEC-200-2009-019.PDF.

[iii] Contract term from SDG&E SEC 10k filing for FY09

[iv] LADWP is entitled to receive 44.617% of the plant's capacity rating. LADWP has also purchased a 4% entitlement of the plant from Utah Power and Light. Both of these entitlements are valid until the 2027 contract termination date. In addition, LADWP can receive up to an additional 18.168% entitlement under the Excess Power Sales Agreement, however this percentage, or portions of this percentage, can be recalled from LADWP by other IPP participants, given certain defined advanced notices. The Intermountain Power Agency, which operates the plant, budgeted that LADWP would use 8.8% of this entitlement in 2009 for a total share of 53.5%. Over the last several years, some of the Utah municipal participants of the IPP have exercised their recall rights for IPP power. LADWP has been receiving approximately 300 MW from the Utah municipalities under an Excess Power Sales Contract since the start up of the project. In addition, the Utah municipalities have indicated an interest to construct a third IPP unit. LADWP has stated that it will not participate in the ownership of a new IPP unit 3.
http://www.sao.state.ut.us/pr/special/2010/10dhipa.pdf.

[v] LADWP's agreement began on February 1, 1983 and ends on June 15, 2027. There is an extension clause providing for continuation of entitlement shares of project output. The CEC reports the contract will expire earlier (12/31/2024), but all other sources – IPA reports; LADWP IRPs – note that all Intermountain contracts with CA POUs expire June 15, 2027. See, e.g. IPA 2009 annual report, available at:

http://www.ipautah.com/data/upfiles/pdfs/2008-2009%20Annual%20Report%20_final%20version_L.pdf; LADWP 2007 IRP, available at: http://www.ladwp.com/ladwp/cms/ladwp010273.pdf.

[vi] Glendale may obtain additional capacity under an Excess Power Sales Agreement and is estimated to have used an additional 0.2% in 2009, for a total share of 1.9%. See note 13, *supra*.

[vii] Pasadena may obtain additional capacity under an Excess Power Sales Agreement and is estimated to have used an additional 0.8% in 2009, for a total share of 5.2%. See note 13, *supra*.

[viii] Pasadena Water & Power (PWP) committed to reducing its purchases from Intermountain 35MW by 2016 in its 2009 IRP, available at: http://ww2.cityofpasadena.net/waterandpower/IRP/exhibitsJand2.pdf PWP claims this reflects the amount of Intermountain capacity that may be feasible to sell under the existing contract arrangements.

[ix] Burbank may obtain an additional 0.8% under an Excess Power Sales Agreement and is estimated to have used an additional 0.4% in 2009, for a total share of 3.8%. See note 13, *supra*.

[x] On March 23, 1976, LADWP, Arizona Public Service Company (APS), Nevada Power Company (NPC), SRP, Tucson Electric Power Company (TEP) and U.S. Department of Interior executed the Navajo Project Co-Tenancy Agreement effecting the participation as co-owners, operation and maintenance of the Navajo Project until December 31, 2019. LADWP's entitlement of the Navajo Generating Station capability is 21.2%. The Navajo Operating Agent is SRP

[xi] Ownership data from "Management of the California State Water Project" Bulletin 132-05, Chapter 1, page 8, available at: http://www.swpao.water.ca.gov/publications/bulletin/05/Bulletin132-05.pdf.

[xii] SCPPA utilities with ownership interests: Azusa (14.7%), Banning (9.8%), Colton (14.7%), Glendale (9.8%), and Imperial Irrigation District (51%).
Contract term from SCPPA "Independent Auditor's Report and Combined Financial Statements," 2009, available at: http://www.scppa.org/Downloads/Annual%20Report/scppa2008_FINAL_ES.pdf.

[xiii] MSR is a joint powers agency consisting of the City of Santa Clara, the City of Redding, and the Modesto Irrigation District.

April 24, 2012

The Honorable Gina McCarthy
Assistant Administrator for Air and Radiation
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Assistant Administrator McCarthy:

Thank you for meeting with me and representatives of the Western Energy Supply and Transmission (WEST) Associates on Thursday, April 12, 2012. WEST Associates is a coalition of cooperative, public- and investor-owned electric utilities[1] generating electric energy in eleven western states.

EPA's implementation of the Clean Air Act's Regional Haze program directly affects our Best Available Retrofit Technology (BART) – eligible plants, many of which are jointly owned by WEST Associates members. The Regional Haze program and the increased cost of electricity resulting from its implementation affect not only the states in which our plants are located, but also the states into which our electricity is sold.

EPA's proposed actions implementing the Regional Haze program raise a number of serious concerns. We discussed with you EPA's unrealistically low cost estimates for retrofit technology options, a more appropriate pace of achieving reasonable progress toward reductions in manmade visibility impairment, and the need for EPA to be more nimble in updating its models, particularly CALPUFF:

- In our discussion on costs, we noted our concern that EPA's Control Cost Manual is out-of-date. The data in this handbook, which was developed in 2002 to estimate the costs of installing controls, is now a decade old and no longer reflects current market costs of designing, engineering, and installing controls. We also asked you to correct the cost baseline used in EPA's cost estimates in the Manual. EPA should be using emissions from the plant as it exists today as the baseline when calculating the cost of any new, prospective emissions controls, excluding the emissions benefits from control technology already installed (such as Low NOx Burners) on a coal unit.

- Our discussion on modeling raised similar issues. While EPA has adopted the CALPUFF model as the preferred visibility modeling tool, it was developed by a group of professional scientists and engineers. These professionals continue to update and improve CALPUFF. EPA adopted and uses a version of CALPUFF that was introduced in 2007. The developers have since updated parts of CALPUFF in 2008, 2010, and 2011,

[1] WEST Associates Members include Arizona Electric Cooperative, Basin Electric Cooperative, NV Energy, PacifiCorp, Public Service of New Mexico, Salt River Project, Tri-State Generation and Transmission Association, Inc., Tucson Electric Power Co., and Colorado Springs Utilities.

but EPA has chosen not to use the most recent version of the model. We urge you to take steps to update the CALPUFF model and ensure that it is used in the agency's BART determinations.

- We also discussed how the Regional Haze program does not require that emission reductions occur on a date certain; rather, it is a long-term program designed to improve visibility in Class I areas with the national goal of achieving natural visibility conditions by 2064. The timing of emissions control projects is important; for example, they are often synched with opportunities for customer cost savings, such as scheduling projects to coincide with planned coal unit maintenance outages. Also, planning emission reductions over a longer period of time allows states and regulated entities to rely on coal unit retirements as part of a comprehensive emissions reduction strategy. If emissions reductions are front loaded (pre-2018), the remaining operating life of older coal units could be extended a decade or two in order to recoup the costs of expensive new controls required by a federal plan.

During our recent discussion, we particularly appreciated your interest in assuring that the regions administer the Regional Haze program consistently. We also appreciated your openness to looking into some of the problems we face, including the institutional issues of getting more accurate, realistic cost data; thinking about the cost baselines differently; and addressing the air quality modeling issues.

We committed to providing you with "real world" cost data as bid information is made available to WEST companies as they act on Regional Haze Implementation Plans. We will follow up with you on this information as soon as practicable.

In conclusion, I want to restate our appreciation for the time you spent with us and your openness to continuing to work with us on implementation of the Regional Haze program. If you have any questions or need additional information, please do not hesitate to contact me at ebakken@tep.com or by telephone at (520) 918-8351. Thank you for your consideration.

Sincerely,

Erik Bakken, President of the Board
WEST Associates

Mr. WHITFIELD. Well, thank you, and thank all of you for your testimony. I really wish we had maybe a full day for this hearing because there are so many issues here, and one thing that all of us recognize, that when you deal with EPA regulations and enforcement actions, it is very complex and it is not easy to discuss in a readily comprehensible way.

Now, of the people on this first panel, how many of you have worked, as a part of the responsibility of the job you have, have worked closely with Region 6 on issues affecting you in one way or another? Would you raise your hand if you have worked quite frequently with Region 6? OK. Everyone raised their hand except Dr. Mintz.

Now, when I go to Kentucky and I talk to farmers and I talk to coal miners and I talk to natural gas producers, they tell me that they genuinely believe that there is a bias against fossil fuel at EPA. So for those of you who have worked with them on a regular basis, would you tell me your personal belief? Do you believe honestly that there is a bias against fossil fuel within the Region 6 EPA? Mr. Smitherman?

Mr. SMITHERMAN. Mr. Chairman, I do believe there is a bias. I think it is reflected in the onslaught of regulations we have seen coming out of this administration first directed at coal. Effectively, now, you cannot build a new coal plant in America. And now more increasingly directed against oil and natural gas.

Mr. WHITFIELD. OK. Mr. Shaw?

Mr. SHAW. Yes, Mr. Chairman, thank you. I do believe there is a bias. It is demonstrated not only in the enforcement action we have talked about today but many of the regulatory actions that have been coming forth, which EPA seems to go to great lengths to attempt to justify outside of the normal process without following their own rules and regulations. And quite frankly, it follows the examples we talked about with Dr. Armendariz' comments and others on EPA's philosophy.

Mr. WHITFIELD. Mr. Sullivan?

Mr. SULLIVAN. Yes, Mr. Chairman, I do think there is a bias, and I think it comes from the top. Whenever you have a President once a week out there hammering against fossil fuels, it is natural for those in the various agencies to be very aggressive in promulgating that, and I definitely see a bias in their actions and in their words.

Mr. WHITFIELD. Mr. Etsitty?

Mr. ETSITTY. Thank you for the question, Mr. Chairman. I believe there is a difference, and I wouldn't characterize it as a bias, and I would compare our work with EPA under other offices other than the Office of Air and Radiation, especially when we talk about our consultation processes. We have had successful consultation and worked on many issues with EPA, Region 6 and Region 9, but under the Clean Air Act issues, it has been very difficult.

Mr. WHITFIELD. So it has been different under the Clean Air Act?

Mr. ETSITTY. Yes.

Mr. WHITFIELD. And I think you made the statement that they were not following their consultation obligations under the Clean Air Act?

Mr. ETSITTY. That is correct.

Mr. WHITFIELD. Mr. Short?

Mr. SHORT. Thank you, Mr. Chairman, and I would say that there certainly is a preference towards natural gas versus coal in dealing with EPA Region 6, but let me just say from that perspective, you know, you guys have great jobs in producing legislation and EPA regulates, and my job is to comply as best I can with the best technology and at the most cost-effective and reasonable approach. So even though there may be a preference towards natural gas, I still need to deal in the world that is given to me today, which is, I have got to comply.

Mr. WHITFIELD. And you import electricity from New Mexico, the Four Corners Generating Station and San Juan station? Do you import electricity from those areas?

Mr. SHORT. That is correct. We bring electricity in from the Four Corners as does SCPPA. It comes in through lines that we own with our friends and our partners and then it comes all the way up to Central Valley into Modesto and then over to Santa Clara and up to Redding.

Mr. WHITFIELD. And there is no question in your mind that EPA and environmental groups are trying to require that you not buy electricity produced from coal in New Mexico. Is that correct?

Mr. SHORT. Yes, there is a law in California. It is called 1368 which really prohibits the investment in new coal-fired facilities and also prohibits the investment in upgrading existing coal-fired facilities to extend the life of those facilities. So there is a move to eliminate coal in California.

Mr. WHITFIELD. And you said that all of this really comes from the effort to reduce regional haze in that area. Is that correct?

Mr. SHORT. Well, California has a different set of rules. They established that over the last couple years in preventing coal from coming into California, or coal-fired electricity from coming into California. The regional haze issue is another concern that we have, which is layered on top of the California mandates.

Mr. WHITFIELD. And you know, every time—we have had lots of hearings with EPA, and every time they come up here, on every regulation, they talk about the necessity for these regulations because of health. Now, you said that in the regional haze issue that health has nothing to do with that. Is that correct?

Mr. SHORT. It is a visibility issue, not a health issue.

Mr. WHITFIELD. My time is expired. Thank you very much.

At this time I would recognize the gentleman from Illinois, Mr. Rush, for 5 minutes.

Mr. RUSH. I want to thank you, Mr. Chairman.

Mr. Chairman, you asked a question of how many of the witnesses have been involved personally with the EPA. I would like to ask the witnesses, how many of the witnesses present at the witness table today were personally invited to testify at this hearing by the chairman or the chairman's staff? Please raise your hands. How many were personally invited by the chairman or the chairman's staff to testify at the hearing today? Let me ask it again. How many of the witnesses were personally invited by the chairman, Mr. Whitfield, or the chairman's staff? My point is that five of the six witnesses were invited, but the fact that five of them are representing industry, that is the point that I am trying to make

and that they were invited. Only one witness is a Democratic witness. We would like to have had more, absolutely.

Now, I wanted to ask Dr. Mintz, the Associated Press examined 10 years of data on the EPA's enforcement of noncompliance by oil and gas producers, and according to their independent analysis, the number of enforcement cases against oil and gas companies in Region 5 and also across the Nation has been lower every year under the Obama administration than any year under the Bush administration. In fact, the EPA reported that nationally, the number of enforcement actions against oil and gas producers dropped by 61 percent over the last decade from 224 in 2002 to 87 in the year 2011. And the AP notes that this decline has occurred even though the number of wells has increased, and EPA has listed energy extraction as a priority enforcement area.

Dr. Mintz, are you familiar with this AP analysis? And if so, would you concur with the findings of this independent and unaffiliated analysis?

Mr. MINTZ. Yes, sir, I am familiar with it, and to my knowledge, it is correct. From what I understand, EPA's statistics actually cover a somewhat broader range than just the oil and gas industry, I have been informed, but nonetheless, it is, I think, substantially correct and I have no reason to doubt their figures.

Mr. RUSH. As you can see, Dr. Mintz, and as I tried to point out, there are no witnesses today from the public health sector. All industry witnesses today, or five of the six are industry witnesses today. They are from industry, none from the public health sector. They are all from industry. As a former chief attorney with the U.S. Environmental Protection Agency in Chicago and here in Washington, I wonder if you might briefly speak about some of the health impacts associated with air and water pollution that EPA and the Clean Air Act were initially designed to address.

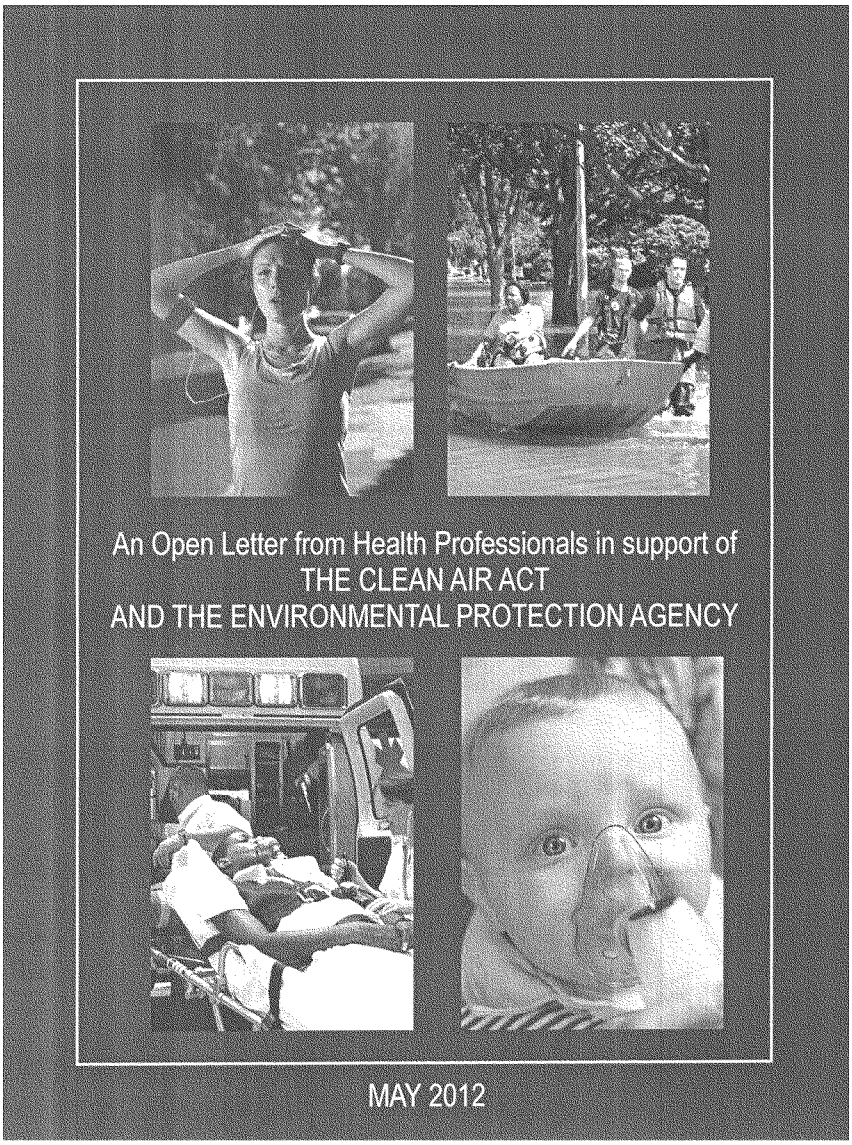
Mr. MINTZ. Certainly, sir. I don't pretend to be an expert on public health issues or epidemiology but just as a matter of general knowledge from my work at EPA, I know that the Clean Air Act was aimed at preventing or lowering the incidence of lung diseases. They are related to a number of times of emissions of pollutants, for example, sulfur dioxide, small particulate matter and other kinds of emissions that have an unhealthy impact.

Mr. RUSH. I want to thank you.

And Mr. Chairman, I do have an open letter from 350 health professionals to policymakers in support of the Clean Air Act and the EPA that was submitted to my office, and I would like to submit both the AP report and also the open letter to policymakers. I would like to submit that for the record.

Mr. WHITFIELD. Without objection.

[The information follows:]


An Open Letter from Health Professionals in support of
THE CLEAN AIR ACT
AND THE ENVIRONMENTAL PROTECTION AGENCY
MAY 2012

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

May 2012

As physicians, nurses, and public health experts, we urge our policy makers to support the Environmental Protection Agency's (EPA's) ability under the Clean Air Act to take action that will protect public health and address climate change.

Climate change poses significant threats to the health and well-being of all Americans, with disproportionate impacts on children, the elderly, and the poor. Our own medical journals[1,2,3,4,5] and professional organizations (such as the American Medical Association,[6] American Academy of Pediatrics,[7] American Public Health Association,[8] and American Nursing Association[9]) have sounded the alarm. Health effects will include heat-related illnesses, exacerbated cardiovascular and respiratory diseases, more frequent outbreaks of water-borne diseases (such as *Cryptosporidium*) and vector-borne diseases (such as West Nile virus), and mental health impacts resulting from the stress of coping with extreme weather including flooding and hurricanes.[10]

The human and economic costs of these impacts are grave. For instance, a recent report from the Union of Concerned Scientists estimates that in 2020, the continental United States could pay an average of $5.4 billion (in 2008 dollars) in health-related costs due to the increase in surface-level ozone associated with rising temperatures.[11]

On April 2, 2007, the Supreme Court ruled that global warming emissions are air pollutants covered by the Clean Air Act (CAA).[12] Subsequently, the EPA performed an exhaustive review of the relevant scientific research and determined that global warming emissions endanger public health and welfare and therefore must be regulated under the CAA.[13] Because the EPA's finding is based on well-established science, any effort to prevent or delay the agency from taking action to reduce global warming emissions is a rejection of that science.

The EPA is charged with protecting our public health and our environment, and the Clean Air Act is an extraordinarily successful and cost-effective way of doing so. In 2010 alone, this science-based law prevented an estimated 160,000 premature deaths and millions of cases of respiratory and cardiovascular disease—annual benefits that are projected to grow during the next decade. The Clean Air Act is also good for the economy, with its benefits exceeding its costs by 26 to 1.[14] Now the EPA must be allowed to act on its authority under the law and begin regulating global warming emissions.

Keeping in mind the urgency of America's climate and energy challenges, the prohibitive cost of inaction, and the many benefits of acting today, we urge you to oppose all attacks on the Clean Air Act. Please respect the scientific integrity of the EPA's endangerment finding and the agency's ability to act based on this finding, and stand up for the public health and economic good of our nation.

ENDNOTES

1. Costello, A., et al. 2009. Managing the health effects of climate change. *The Lancet* 373 (9676):1693–1733. May 16.
2. Epstein, P.R. 2005. Climate change and human health. *New England Journal of Medicine* 353:1433–1436. October 6.
3. Haines, A., and J.A. Patz. 2004. Health effects of climate change. *Journal of the American Medical Association* 291:99–103. January 7.
4. Rom, W.N. 2008. Global warming: A challenge to all American Thoracic Society members. *American Journal of Respiratory and Critical Care Medicine* 177:1053–1054.
5. Shea, K.M. 2007. Global climate change and children's health. *Pediatrics* 120:e1359–e1367. October.
6. American Medical Association. 2008. Report 3 of the Council on Science and Public Health. Online at *http://www.ama-assn.org/resources/doc/csaph/csaph3i08-summary.pdf.*
7. American Academy of Pediatrics. 2007. Global Climate Change and Children's Health. Online at *http://aappolicy.aappublications.org/cgi/reprint/pediatrics;120/5/1149.pdf.* November 2007.
8. American Public Health Association. 2007. Addressing the urgent threat of global climate change to public health and the environment. November 6. Online at *http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1351.*
9. American Nurses Association. 2009. ANA cautions about health effects of climate change at press conference. November 23. Online at *http://www.nursingworld.org/MainMenuCategories/OccupationalandEnvironmental/environmentalhealth/Health-Professions-Speak-Out-About-Climate-Change.aspx.* 2009.
10. Physicians for Social Responsibility. No date. *The medical and public health impacts of global warming.* Online at *http://www.psr.org/assets/pdfs/global-warming-fact-sheet.pdf.*
11. Union of Concerned Scientists. 2011. *Climate change and your health: Rising temperatures, worsening ozone pollution.* Online at *http://www.ucsusa.org/climatechangeandozonepollution.*
12. Massachusetts v. EPA, 549 U.S. 497 (2007). Text of opinion online at *http://www.supremecourt.gov/opinions/06pdf/05-1120.pdf.*
13. U.S. Environmental Protection Agency (EPA). 2009. Endangerment and cause or contribute findings for greenhouse gases under Section 202(a) of the Clean Air Act. Online at *http://www.epa.gov/climatechange/endangerment.html.*

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

*The signers of this statement are physicians, registered or advanced practice nurses, or experts with a master's or Ph.D. in public health. * denotes convening signer.*

A COMPLETE LIST OF THE 357 SIGNERS

ALASKA

Jill Seaman, MD
Bethel, AK

ALABAMA

David Smith, MD
Spanish Fort, AL

ARKANSAS

Hosea Mcadoo, MD
Sherwood, AR

ARIZONA

Mark Brown, MD
Tucson, AZ

Gerald Karches, MS
Tucson, AZ

M. Elizabeth Hunter, MPH
Phoenix, AZ

Ulrich Michael, MD
Tucson, AZ

Linda Smith Schermer, MPH
Sedona, AZ

Eve Shapiro, MD
Tucson, AZ

Barbara Warren, MD
Tucson, AZ

CALIFORNIA

John Ackerman, MD
Santa Barbara, CA

Zia Ahari, MD
San Rafael, CA

Ed Avol, MD
Los Angeles, CA

Jerald Abajian, MD
Napa, CA

Barbara Baehr, MD
San Diego, CA

Laura Balestreri, MD
Oakland, CA

Ann Blake, PhD
Alameda, CA

Ronald Blond, MD
Rancho Palos Verdes, CA

James Bronk, MD
Napa, CA

Elizabeth Carlton, PhD
Oakland, CA

Donna Carr, MD
Encinitas, CA

Jiu-Chiuan Chen, MD, MPH, ScD
Los Angeles, CA

Edward Cruz, MD
Davis, CA

Phyllis Cullen, MD
Chico, CA

Stanley Dawson, PhD
Davis, CA

Edward Cruz, MD
Davis, CA

George Ellison, MD
San Diego, CA

Jessica Fielden, MD
Oakland, CA

Austin Fite, MD
Pacific Palisades, CA

Charles Fischer, MD
San Rafael, CA

Cheri Forrester, MD
Mill Valley, CA

Roger Fox, MD
Carlsbad, CA

Kenneth Frausto, MD
Oakland, CA

Maria Garcia, MD
San Francisco, CA

Warren Gold, MD
Mill Valley, CA

Nayvin Gordon, MD
Oakland, CA

Omar Guzman, MD
Fresno, CA

Timothy M. Hall, MD, PhD, MA
Los Angeles

Jerome Hoffman, MD
Beverly Hills, CA

Martin Joye, MD
Vacaville, CA

Betty Jung, RN, MPH
Oakland, CA

Thomas Knecht, MD
Oakland, CA

James Koss, MD
Richmond, CA

Jeffrey Kupperman, MD
Santa Barbara, CA

Donald Lahti, MD
Beaumont, CA

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Piper Lillehoff, MD
Irvine, CA

Robert Lowen, MD
Palo Alto, CA

Erica Lubliner, MD
Los Angeles, CA

Richard Maddock, MD
Davis, CA

Teresa McColley, RN
Santa Rosa, CA

Robert Meagher, MD
Sacramento, CA

Lloyd Peckner, MD
Santa Monica, CA

Dennis Pocekay
Petaluma, CA

Stephen Read, MD
San Pedro, CA

Sidney Reiff, MD
Beverly Hills, CA

Linda Rosenstock, MD, MPH*
Los Angeles, CA

Kathy Ruppel, MD
Stanford, CA

Fredrick Seil, MD
Berkeley, CA

Daniel Silver, MD
Los Angeles, CA

Gina Solomon, MD, MPH
San Francisco, CA

Robert Spear, PhD
Berkeley, CA

Mark Spohr, MD
Tahoe City, CA

Arthur Strauss, MD
Irvine, CA

Carl Sufit, MD
Escalon, CA

Robert Sullivan, MD
Sacramento, CA

M. Kelly Sutton, MD
Fair Oaks, CA

Jon Trefil, MD
Albion, CA

Harry Wang, MD
Sacramento, CA

Stephen Weber, MD
Sacramento, CA

Mel Werbach, MD
Springville, CA

Junfeng (Jim) Zhang, PhD
Los Angeles, CA

COLORADO

Wayne Crill, MD
Fort Collins, CO

Kenneth Kutalek, MD
Evergreen, CO

Michael Paterson, MD
Monte Vista, CO

Laurel Starr, MD
Golden, CO

Huibert Vriesendorp, MD
Silverthorne, CO

CONNECTICUT

Kathleen Cooper-McDermott, MSN, MPH
Groton, CT

Michael Corjulo, APRN
North Haven, CT

Vittoria Gassman, MD
Norwalk, CT

J. Michael Herr, MD
West Hartford, CT

Peter Kennedy, PhD
West Hartford, CT

Ruth Knollmueller, RN, PhD
Cheshire, CT

Mark Mitchell, MD, MPH
Hartford, CT

Justin Paglino, MD
Guilford, CT

Jonathan Stolzenberg, MD
West Hartford, CT

John Strauss, MD
New Haven, CT

Carolyn Jean Webb, SM, MS
West Hartford, CT

Faith Weidner, MD
Simsbury, CT

Monica Wheeler, MSN, RN
Westport, CT

DISTRICT OF COLUMBIA

Tee Guidotti, MD, MPH
Washington, DC

DELAWARE

Alyssa Pensirikul, MD, PhD
Wilmington, DE

FLORIDA

Philip Blaustein, MD
Parrish, FL

Raymond Bellamy, MD
Tallahassee, FL

Alan Delamater, PhD
Plantation, FL

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Barrett Dick, MD
Bradenton, FL

Sandra Gompf, MD
Plant City, FL

Marybeth Palmigiano, MPH
Tampa, FL

Cynthia Tainsh, MD
Orlando, FL

GEORGIA

Vernon Dixon, MD
Hiawassee, GA

Gail Heaberg, APRN
Warner Robins, GA

Jeremy Hess, MD, PhD
Decatur, GA

Karen Levy, PhD
Atlanta, GA

Gary Ludi, MD
Roswell, GA

Michele Marcus, PhD
Atlanta, GA

Michael McGeehin, PhD, MSPH
Atlanta, GA

J Paul Newell, MD
Cartersville, GA

Justin Remais, PhD
Atlanta, GA

HAWAII

Sue Felt, RN, MS, MPH
Kailua Kona, HI

IDAHO

Glen Albertson, MD
Twin Falls, ID

ILLINOIS

Neil Aronson, MD
Skokie, IL

Carmen Del Cid, CPNP
Chicago, IL

Linda Forst, MD, MPH
Chicago, IL

Jill Fraggos, MPH
Chicago, IL

David Ganch, MD
Chicago, IL

Michele Kelley, ScD
Chicago, IL

Kristine Kristine, APN
Chicago, IL

Karen Manning, NP
Lisle, IL

Dana March, PNP
Chicago, IL

Marvin Makinen, MD
Chicago, IL

Susanna McColley, MD
Chicago, IL

Rachel Rubin, MD
Chicago, IL

Barbara Sargent, PNP
Libertyville, IL

Jennifer Weuve, ScD, MPH
Chicago, IL

Eric Wilson, MD
Chicago, IL

INDIANA

Denise Ward, DO
Bristol, IN

Howard Christofersen, MD
Porter, IN

Richard Newcomb, MD
Portage, IN

KANSAS

Ann Suellentrop, MS, RN
Kansas City, KS

KENTUCKY

Keisa Bennett, MD, MPH
Lexington, KY

Virginia Bush, RN
Louisville, KY

Denise Puthuff, MD
Louisville, KY

MASSACHUSETTS

William Abend, MD
Wellesley Hills, MA

Melissa Bartick, MD
Cambridge, MA

Doris Berger, MD
Brookline, MA

Suzanne Cashman, ScD
Newtonville, MA

Stephanie Chalupka, EdD, APRN
Worcester, MA

David Christiani, MD, MPH, MS
Boston, MA

Trina Cysz, RN, MPH
Belchertown, MA

Paul Epstein, MD, MPH deceased*
Boston, MA

Jonna Gaberman, MD
Longmeadow, MA

Arthur Gionti, MD
Amherst, MA

Rose H. Goldman, MD, MPH
Cambridge, MA

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Barbara Goldoftas, PhD
Worcester, MA

Pamela Grace, PhD, APRN
Chestnut Hill, MA

Beverly Hector-Smith, NP
Natick, MA

Ben Kerman, MD
Arlington, MA

Gerald Keusch, MD
Boston, MA

Nathaniel Kuhn, MD
Belmont, MA

Charles Lidz, PhD
Sutton, MA

Jack Paradise, MD
Belmont, MA

Robert Petersen, MD
Cambridge, MA

James Philip, MD
Chestnut Hill, MA

Christine Rogers, PhD
Amherst, MA

Beth Rosenberg, ScD, MPH
Somerville, MA

Jeffrey Scavron, MD
Springfield, MA

Kathleen Szegda, MPH, MS
Springfield, MA

Bruce Wintman, MD
Springfield, MA

MARYLAND

Brenda Afzal, RN, MS
Ellicott City, MD

Karyn Anderson, PhD, MD
Baltimore, MD

Viviana Cuberos, MD
Baltimore, MD

Laurette Cucuzza, MPH
Silver Spring, MD

Monique Dubois-dalcq, MD
Bethesda, MD

Kelly Fritz, MD
Leonardtown, MD

Lorne Garrettson, MD
Sandy Spring, MD

Katie Huffling, MS, RN, CNM
Mount Rainier, MD

Mary Lo, MD
Germantown, MD

Thomas Moench, MD
Baltimore, MD

Cindy Parker, MD, MPH
Baltimore, MD

Liz Perera, MPH
Bethesda, MD

Minerva Romero Arenas, MD
Baltimore, MD

Mario Teran, MD
Baltimore, MD

MAINE

Janet Ordway, MD
Old Orchard Beach, ME

Edward Walworth, MD
Lewiston, ME

MICHIGAN

Stuart Batterman, PhD
Ann Arbor, MI

Alfred Franzblau, MD
Ann Arbor, MI

Joseph Hess, MD
East Lansing, MI

Howard Hu, MD, MPH, ScD*
Ann Arbor, MI

Larry Junck, MD
Ann Arbor, MI

Shawn Kimmel, PhD, MA
Detroit, MI

Kenneth Rosenman, MD
East Lansing, MI

MINNESOTA

Ann Bajari, MPH
Annandale, MN

David Councilman, MD
Minneapolis, MN

Deborah Mielke, MD
Maple Grove, MN

MISSOURI

Lester Bickford, MD
Kansas City, MO

Joan Butcher, MD
Saint Louis, MO

Carmen Federowich, MD
Monroe City, MO

MISSISSIPPI

Janet Black, BSN, MSN, MPH
Hattiesburg, MS

Swink Hicks, MD
Madison, MD

MONTANA

Kathleen Masis, MD
Billings, MT

NORTH CAROLINA

Alan Archbold, DO
Hillsborough, NC

William Blackley, MD
Elkin, NC

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Deborah Fields, MD
Greensboro, NC

Priscilla Guild, MSPH
Chapel Hill, NC

Jonathan Kotch, MD
Durham, NC

Jack Leiss, PhD
Mebane, NC

Thomas Mutton, MD
Winston Salem, NC

Donna Newman, PhD
Raleigh, NC

Lewis Patrie, MD
Asheville, NC

Martha Payne, PhD, MPH
Durham, NC

Karin Yeatts, PhD
Chapel Hill, NC

NEW HAMPSHIRE

Phillip Hunt, ScD
Newfields, NH

Michael OSullivan, PhD
Madbury, NH

Nathan Sidley, MD
Wonalancet, NH

Mark Windt, MD
North Hampton, NH

NEW JERSEY

Karen KellyThomas, PhD, RN
Gibbsboro, NJ

Judith Klotz, DrPH, MPH
Lawrenceville, NJ

Luis Montesinos, MD
Little Falls, NJ

Marian Nowak, MEd, MSN, MPH
Sicklerville, NJ

Joseph Ponessa, PhD, MS
Moorestown, NJ

Ninu-Alexandri Quirk, MD
Deal, NJ

Derek Shendell, DEnv, MPH
Chatham, NJ

Mary Ellen Teshima, RN
Towaco, NJ

Michael Yellin, MD
Montclair, NJ

NEW MEXICO

Eileen Barrett, MD
Shiprock, NM

Robert Bernstein, MD
Santa Fe, NM

Yadira Caraveo, MD
Albuquerque, NM

Gene Chorostecki, MD
Santa Fe, NM

Anita Holtz, MD
Albuquerque, NM

Norton Kalishman, MD
Albuquerque, NM

Barry Kirschbaum, MD
Santa Fe, NM

Jean MacPhail, MD
Santa Fe, NM

Stephen Markowitz, MD
Santa Fe, NM

James Montesinos, MD
Santa Fe, NM

James Sitrick Jr, MHSc
Santa Fe, NM

Jon Spar, MSPH
Albuquerque, NM

Barbara Starfield, MD deceased
Las Cruces, NM

Alex Stelzner, MD
Albuquerque, NM

NEVADA

James Lawrie, MD
Reno, NV

Nancy Menzel, RN, PhD
Las Vegas, NV

William Schaffer, MD
Las Vegas, NV

NEW YORK

Carl W. Braun, MD
New York, NY

Norma MT Braun, MD
Thornwood, NY

Joan Budd, MD
Pleasantville, NY

Cenie Cafarelli, MD
Rochester, NY

Vanessa Calderón, MD
Ithaca, NY

Megan Cea, MD
White Plains, NY

Gordon Comstock, MD
Arcade, NY

Margaret Craven, MD
Voorheesville, NY

Dominic Ferro, MD
Nanuet, NY

Frederic Joyce, MD
Utica, NY

Joseph Graziano, PhD
New York, NY

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Jessica Kandel, MD
New York, NY

Andrew Kanter, MD, MPH
New York, NY

Elizabeth Kinney, MS
Albany, NY

Gerald Kolbert, MD
Larchmont, NY

Philip Landrigan, MD, MSc
New York, NY

Gerson Lesser, MD
Bronx, NY

Jaymie Meliker, PhD
Port Jefferson, NY

Jill Nord, MD
Glendale, NY

Stacey Plichta, ScD
New York, NY

Richard Schloss, MD
Huntington, NY

Mary Ann Segal, MD
Bronx, NY

Vincent Silenzio, MD, MPH
Rochester, NY

Sayone Thihalolipavan, MPH
New York, NY

Ruth Walker, MD, PhD
Brooklyn, NY

Mark Weller, MD
Scarsdale, NY

OHIO

Mary Brown, MPH
Morrow, OH

Timothy Buckley, PhD*
Columbus, OH

Jason Chao, MD
Cleveland, OH

Elaine Connelly, RN
Broadview Heights, OH

Kim Conway, RN
North Royalton, OH

Anne Davy, RN, MS
Prospect, OH

Daniel Dawley, MD
Bowling Green, OH

Chantal Dothey, MD
Cleveland, OH

Therese Dowd, PhD, RN
Akron, OH

Lois McClelland, RN
Sheffield Lake, OH

Theodore Nichols, MD
Painesville, OH

Barbara Polivka, PhD
Columbus, OH

Chris Rea, MPH
Columbus, OH

Ann Reichsman, MD
Cleveland Heights, OH

Susan Righi, MD
Athens, OH

Jonathan Slaughter, MD
Bexley, OH

Julia Veres, MSN
Cleveland Heights, OH

Ann Williams, MD
Cleveland Heights, OH

Chadwick Wright, MD
Lewis Center, OH

Theodore Nichols, MD
Painesville, OH

Barbara Polivka, PhD
Columbus, OH

Chris Rea, MPH
Columbus, OH

Ann Reichsman, MD
Cleveland Heights, OH

Susan Righi, MD
Athens, OH

Jonathan Slaughter, MD
Bexley, OH

Julia Veres, MSN
Cleveland Heights, OH

Ann Williams, MD
Cleveland Heights, OH

Chadwick Wright, MD
Lewis Center, OH

OKLAHOMA

G. Edward Shissler, MD
Edmond, OK

OREGON

Stephen Bachhuber, MD
Happy Valley, OR

Nicholas De Morgan, MD
Portland, OR

Martin Donohoe, MD
Lake Oswego, OR

Nancy Loeb, MD
Portland, OR

Jenny Pompilio, MD
Portland, OR

Berklee Robins, MD
Lake Oswego, OR

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Irene Saikevych, MD
Talent, OR

Catherine Thomasson, MD
Corvallis, OR

PENNSYLVANIA

Nicholas Abend, MD
Philadelphia, PA

Jeffrey Bedrick, MD
Newtown Square, PA

Cheryl Bettigole, MD
Philadelphia, PA

Lisa Evans, MD
Philadelphia, PA

Arthur Frank, MD, PhD
Philadelphia, PA

Bernard D. Goldstein, MD
Pittsburgh, PA

George Leikauf, PhD
Pittsburgh, PA

Felicia Lewis, MD
Philadelphia, PA

Walter Margie, MD
Bethlehem, PA

Dora Martinez-Armstrong, RN
Philadelphia, PA

Mark Mishkin, MD
Philadelphia, PA

Marvin Rosenthal, MD
Easton, PA

Michael Rusli, MD
Hummelstown, PA

Walter Tsou, MD, MPH
Philadelphia, PA

D. Sandra Whipple, MD
Merion Station, PA

RHODE ISLAND

Polly Walker, MD, MPH
Rumford, RI

SOUTH CAROLINA

Cynthia Schandl, MD, PhD
Charleston, SC

SOUTH DAKOTA

John Whitney, MD
Rapid City, SD

TENNESSEE

David Head, MD
Nashville, TN

Linda Head, RN
Nashville, TN

F. Menking, MD
Nashville, TN

Joan Mitchell, RN, MPH
Hermitage, TN

David N. Orth, MD
Nashville, TN

Dow Strader, MD
Bristol, TN

TEXAS

John Calomeni, MD
Lajitas, TX

Miguel Fernández, MD
San Antonio, TX

Ronald Fisher, MD
Houston, TX

Diane Graves, MPH
Austin, TX

Paul Mayer, MD
Livingston, TX

Lynnette Mazur, MD, MPH
Houston, TX

Celeste Monforton, DrPH, MPH
San Marcos, TX

Marian Morris, MD, MPH
Austin, TX

Arnold Schecter, MD, MPH
Dallas, TX

Carolina Young-Ortiz, MD
Houston, TX

UTAH

Sherman Bloom, MD
Salt Lake City, UT

Cris Cowley, MD
Cottonwood Heights, UT

Dirk Davis, MD
Logan, UT

Richard Kanner, MD
Salt Lake City, UT

Brian Moench, MD
Salt Lake City, UT

Anthony Musci, MD
Salt Lake City, UT

Suzanne Stensaas, PhD
Salt Lake City, UT

VIRGINIA

Laura Anderko, PhD, RN
Annandale, VA

Kenneth Ballew, MD
Ivy, VA

Virginia Barber, MD
Crozet, VA

Larry K. Heath, MD
Broad Run, VA

George Hoke, MD
Charlottesville, VA

Health Professionals' Open Letter to Policy Makers in Support of the Clean Air Act and the Environmental Protection Agency

Irma Mahone, PhD, RN
Charlottesville, VA

Marcia McDuffie, MD
Roseland, VA

Mary Picardi, MD
Virginia Beach, VA

Pellavi Sharma, MPH
Arlington, VA

Surili Sutaria, MS
Arlington, VA

David Williams, MD, PhD
Midlothian, VA

WASHINGTON

John Butler, MD
Lake Forest Park, WA

Sari Lisa Davison, MD
Seattle, WA

Jerrold Eichner, MD
Seattle, WA

Howard Frumkin, MD, MPH*
Seattle, WA

Mary Hutchison, NP
Seattle, WA

Steve Kohl, MD
Brush Prairie, WA

Jeffrey Paul LaGasse, MD
Freeland, WA

Ralph Myer, MD
Seattle, WA

Tracy Ouellette, MD
Bow, WA

Robert Stagman, MD
Mercer Island, WA

WISCONSIN

Robert Block, MD
Madison, WI

Mary Canales, PhD
Eau Claire, WI

Derek Clevidence, MD
Cottage Grove, WI

Theresa Guilbert, MD
Madison, WI

Bruce Krawisz, MD
Marshfield, WI

Jed Maker, MD
Milwaukee, WI

Wanda Martinez, MD
Milwaukee, WI

Dennis Ryan, MD
La Crosse, WI

Richard Schmelzer, MD
Madison, WI

Peter Sigmann, MD
Sturgeon Bay, WI

Joseph Thompson, MD
Tigerton, WI

Erika Voss, RN
Wauwatosa, WI

WEST VIRGINIA

Sarah Knox, PhD, MS
Morgantown, WV

* denotes convening signer

This letter was compiled by the Union of Concerned Scientists on behalf of the signers.

Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

YAHOO! NEWS

FACT CHECK: Oil stats belie tough enforcement talk

By DINA CAPPIELLO and RAMIT PLUSHNICK-MASTI | Associated Press – Thu, May 31, 2012

WASHINGTON (AP) — In the three years since President Barack Obama took office, Republicans have made the Environmental Protection Agency a lightning rod for complaints that his administration has been too tough on oil and gas producers.

But an Associated Press analysis of enforcement data over the past decade finds that's not the case. In fact, the EPA went after producers more often in the years of Republican President George W. Bush, a former Texas oilman, than under Obama.

Also, the agency's enforcement actions have declined overall since 2002 and reached their lowest point last year, the review found.

Accusations of EPA overzealousness peaked in April. That's when a regional administrator resigned after a two-year-old video surfaced in which he compared enforcement of oil and gas regulations with how the Romans used to conquer villages, by finding "the first five guys they saw and they'd crucify them."

GOP critics publicized the video of Al Armendariz, who headed the region that includes Texas and other major oil- and gas-producing states, as an example of what was wrong with an agency that Republican presidential contender Mitt Romney calls "completely out of control."

"We have a genuine concern that his comments reflect the agency's overall enforcement philosophy," six Republican congressmen from Texas, Oklahoma, and Louisiana said in a joint statement the day Armendariz stepped down.

Romney has expressed distaste for the EPA's tactics. The agency, he said late last year, "is a tool in the hands of the president to crush the private enterprise system, to crush our ability to — to have energy, whether it's oil, gas, coal, nuclear."

Actually, the U.S. produced more oil in 2010 than it has since 2003, and all forms of energy production have increased under Obama, but he can't take credit for all of it.

Armendariz' territory, which also includes Arkansas, Louisiana, New Mexico and Oklahoma, has more oil and gas wells than any of EPA's nine other regions. But the number of enforcement cases against companies working those wells has been lower every year under Obama than any year under Bush.

That trend extends to the rest of the country, where the number of enforcement actions against oil and gas producers dropped by 61 percent over the past decade, from 224 in 2002 to 87 last year. The decline came despite an increase in the number of producing wells and despite the EPA's listing of energy extraction as an enforcement priority under Obama. So far this year, the administration has filed 51 formal enforcement cases against energy producers.

While there has been an uptick in the average fine against companies producing oil and gas since 2007, when the penalty reached a low in the decade evaluated by the AP, the average is still lower than during some years under Bush, who was viewed as sympathetic to the oil and gas industry. The year 2011 was an exception; the average soared due to a $20.5 million fine against a BP subsidiary in Alaska. That was the largest penalty against an oil and gas producer under Obama, but it was for a pipeline spill that happened five years earlier.

States usually take the lead on oil and gas enforcement, and federal regulations make clear that is preferred. The EPA's role is mostly limited to ensuring that state rules are in line with federal regulations designed to protect drinking water, waterways and the air.

EPA officials said the lower enforcement numbers reflect a strategy that focuses on the violations that pose the most significant risks to human health and the environment. Many of those occur not at well sites, but at other points in the oil and gas process, such as collection sites and refineries.

The agency, struggling with constant budget cuts in recent years, also doesn't have the manpower to police all the wells nationwide. The states often have more inspectors on the ground than the feds.

In Texas, for example, the Texas Commission on Environmental Quality has 500 inspectors, all of whom do some work with the state's nearly 400,000 oil and gas wells. The Texas Railroad Commission, the agency that oversees drilling, has 153 inspectors. The EPA in all of Region 6 has two oil and gas inspectors.

EPA critics say the problem is bigger than enforcement. They point to regulations that they say hamper oil and gas production and raise refining costs, while giving an advantage to renewable fuels.

"It is this whole mentality that this administration continues to have as they try to pick winners and losers in the marketplace, as they force consumers off oil and gas," said Charles Drevna, president of the American Fuel and Petrochemical Manufacturers, a trade group that represents the refineries and chemical plants that process oil and natural gas.

In articles, Drevna has written that "resignation or not, Obama and the EPA are determined to pursue policies that Armendariz so accurately described."

Critics also say that the data only tell part of the story, since it doesn't include violation notices or emergency orders — such as the one that Armendariz issued in 2010 to Range Resources to stop contaminating a drinking water well and to supply residents with clean water within 48 hours. The order was later withdrawn after a state court ruled that the evidence linking the company's hydraulic fracturing to the well's contamination had been falsified.

Plushnick-Masti reported from Houston.

Online:

EPA: http://w

American Fuel and Petrochemical Manufacturers: http://www.afpm.org/

Follow Dina Cappiello's environment coverage on Twitter (at)dinacappiello.

Ramit Plushnick-Masti can be followed on Twitter at https://twitter.com//RamitMastiAP

Mr. WHITFIELD. And I might say Mr. Smitherman, Mr. Shaw, and Mr. Etsitty have responsibility for health issues. I am positive of that, because you enforce the Clean Air Act under your State Implementation Plan.

OK. At this time I recognize the gentleman from Texas, Mr. Barton.

Mr. BARTON. Thank you, Mr. Chairman.

A couple of editorial comments before I ask my question. All witnesses are invited by the majority staff in consultation with the minority and the minority staff, and I wasn't involved in the witness decisions but my understanding is that if the minority had wanted additional witnesses, I won't say they would have all been accommodated but certainly an effort would have been made to accommodate some of them, and I know from personal interaction with Mr. Whitfield that he is very accommodating to members when they have specific requests.

Mr. RUSH. Will the gentleman yield?

Mr. BARTON. As long as it doesn't come out of my time.

Mr. RUSH. I don't want to take your time, but I just want to note that at one of these hearings, we need to have public health officials, and it would have been real good if we had invited public health officials.

Mr. BARTON. The Chairman of the Texas Railroad Commission, the Chairman of the Texas Commission on Environmental Quality, I believe we have a chief from the Navajo Nation. I believe the gentleman from Oklahoma has statewide responsibility. So to say that those do not represent public health would I think be somewhat disingenuous. That is their function, especially the Texas Commission on Environmental Quality. Its sole function is to protect the public health. They are appointed by the Governor on the advice and consent of the Texas legislature and I would assume similarly in the Navajo Nation and the State of Oklahoma. So they represent——

Mr. RUSH. I don't have the time but if you would yield just another 2 seconds——

Mr. BARTON. I hope that I don't have—I have some really good questions and I hope——

Mr. RUSH. I just want to say to my friend from Texas that you are a very accomplished man and I really respect you a lot, and you have a lot of responsibility as a former chairman of this committee, but I would not want you to testify as a public health expert before this very committee. We need public health experts, not people who have some kind of tangential relationship with public health issues.

Mr. BARTON. Mr. Chairman, I would ask unanimous consent that my clock be reset to 5 minutes.

Mr. WHITFIELD. Mr. Rush insists that that be the case.

Mr. BARTON. Thank you.

Mr. Shaw, you are the Chairman of the Texas Council on Environmental Quality. Is that not correct?

Mr. SHAW. That is correct. I am the Chairman of the Texas Commission on Environmental Quality.

Mr. BARTON. Is Texas air quality improving, about the same, or getting worse?

Mr. SHAW. It is improving, and consistently and fairly dramatically improving.

Mr. BARTON. When President Obama and his Regional Administrator decided to throw out the Texas Flexible Permitting program several years ago, was that because there was statistical evidence that air quality in Texas was disintegrating?

Mr. SHAW. No, sir. There were allegations that somehow the playing field was unlevel, that we were somehow achieving financial success because we weren't upholding the environmental rules, yet the data clearly show we were making continuing environmental improvement.

Mr. BARTON. Mr. Smitherman, you are the Chairman of the Texas Railroad Commission. Is that correct?

Mr. SMITHERMAN. That is correct, sir.

Mr. BARTON. And your agency has regulatory authority over oil and gas operations in the State of Texas. Is that not correct?

Mr. SMITHERMAN. Yes, we regulate oil and gas, lignite coal development. We protect correlative rights, and we have a mission to protect and prevent waste.

Mr. BARTON. And under both Federal and State law, it is your agency that would regulate the practice that is generally called hydraulic fracturing. Is that not correct?

Mr. SMITHERMAN. That is correct. The fracking process, all of which happens underground, is overseen and monitored by our agency.

Mr. BARTON. And when in December—well, actually in August of 2010—a local homeowner in Parker County, a Mr. Lipinski, made a complaint to your agency that he had natural gas in his well water and he asked your agency to investigate that. Is that not correct?

Mr. SMITHERMAN. Yes, sir.

Mr. BARTON. And within days, your agency sent experts to conduct that investigation. Is that not correct?

Mr. SMITHERMAN. That is correct.

Mr. BARTON. And your investigators forwarded their findings to the Region 6 Office of EPA. Is that not correct?

Mr. SMITHERMAN. Yes, sir.

Mr. BARTON. And when the Region 6 Administrator decided to issue a press release, give a television interview and render an enforcement, an emergency enforcement order, against Range Resources, is it also not correct that your predecessor, Chairman Coreo, sent an email to Mr. Armendariz saying that that was premature?

Mr. SMITHERMAN. Correct.

Mr. BARTON. And in spite of that, they went ahead and issued this enforcement order, emergency enforcement order?

Mr. SMITHERMAN. In addition to that, former Chairman Barton, the language used by Mr. Armendariz said that houses could explode if they did not go forward with the enforcement order.

Mr. BARTON. Now, as it turned out, as the Texas Railroad Commission conducted its investigation, they had a hearing and invited the EPA and the homeowner to participate. And it is my understanding that neither the EPA nor the homeowner participated in that hearing. Is that correct?

Mr. SMITHERMAN. That is correct.

Mr. BARTON. But in that hearing, evidence was presented that showed beyond a shadow of a doubt that the natural gas in the well water was not because of hydraulic fracturing. Now, I want to read a statement. This statement is from the pleading of Range Resources. I am going to read it and I want you to tell me if you agree that this is factually correct, and I quote, "The evidence in the record is overwhelming and conclusive. The Range gas wells in the Barnett shale are not the source of the gas in the Lipinski or Haley water wells or in any other area wells, and hydraulic fracturing and all other oil and gas activities have not in any way contributed to the contamination of freshwater in this area. All of the evidence, historic, geologic, microseismic, engineering, gas fingerprinting and water well sampling, establishes that the source of natural gas in the Lipinski well and in the other area water wells is not the Barnett shale but is shallow gas-bearing strong formation. The migration of natural gas from the strong formation to freshwater aquifers is not the result of oil and gas activities but has occurred over decades through a regional natural geologic connection exacerbated by increased pumping from the aquifer and by water wells drilled into the strong." Do you agree with that statement?

Mr. SMITHERMAN. That is correct. That was the conclusion, the gas was naturally occurring. The fingerprinting of it did not match the gas being produced in the Barnett shale.

Mr. BARTON. My time is expired, Mr. Chairman, but what I want to state is, we have strong environmental laws. We expected those laws to be enforced strongly. We expect them also to be enforced fairly. In this case, the Obama administration and the Region 6 Administrator, Mr. Armendariz, had a preconceived conclusion to shut down hydraulic fracturing. They took this case, the Range Resources case. They thought they had the smoking gun. They found out they did not, and yet they continue in a public way to try to castigate hydraulic fracturing. That to me is inexcusable.

Mr. WHITFIELD. The gentleman's time is expired.

At this time I recognize the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Following up my colleague and good friend from Texas, sometimes you have your preconceived conclusion but the facts don't always get there. I have a number of questions I want to get to, but for State regulators, we are all aware of how the EPA got ahead of itself in Parker County, Pavilion, Wyoming, and Dimock, Pennsylvania. Are any of you aware of other instances, maybe not as notable, where the EPA seemed to get ahead of the data and issue a notice of violation or emergency order and just to retract it later?

Mr. SMITHERMAN. Congressman Green, I would say these particular three cases have a fact pattern that is so similar that that is why they are routinely identified as being egregious cases, and those are the ones that we focused on the most.

Mr. GREEN. But if there are other examples, obviously—because these are three separate regions.

Mr. SMITHERMAN. Right.

Mr. GREEN. It is not just Region 6, it is ours in Texas and Pennsylvania, which has had some great success in producing natural gas.

Mr. SMITHERMAN. But the Parker County one was the first, and the others followed behind that.

Mr. GREEN. Any other from any of our State regulators?

My next question is for the Chair of the TCEQ. Mr. Shaw, in your opening statement, you mentioned that the AP analysis that focused on EPA enforcement actions on upstream production. Have you noticed any noticeable trend in enforcement actions on downstream production?

Mr. SHAW. Well, let me say, Congressman Green, first of all, because of the relationship I have, I am not able to talk about enforcement actions within the State because they may involve me making an ultimate decision and so I have to avoid that. But my staff would certainly be able to provide that type of information.

Mr. GREEN. OK. We will ask that on a staff level.

Also, I was frustrated when Texas was included in the Cross State Air Pollution Rule for sulfur dioxide and tried to work with EPA, and again, my colleague Joe Barton and I worked with EPA to no avail, and then talking with Management and Budget and the EPA many times before the rule. Even though Texas was not included in the proposed rule, once they obviously made the decision to include Texas, did they try to work with TCEQ at all before the rule went final?

Mr. SHAW. No, sir, and in fact, we made several requests for an opportunity to meet with either Ms. Jackson or other officials on that issue and were unable to do so, primarily to express concern that without opportunity to comment on that, they were moving forward with the rule. And in fact they did move forward without allowing us to provide input that would have shined a different light on some of the data they used to make that determination.

Mr. GREEN. Well, and one of the concerns I had about that was that a lot of their modeling, although originally most of us who looked at it, Texas wasn't included, but then much after all the discussion, all of a sudden we were, but it was modeling instead of actual on-the-ground facts.

Mr. SHAW. That is correct. The reason they justified including Texas was based on updated data which they didn't give us a chance to evaluate and point out some problems with the updated emissions data as well as modeling to predict that Texas was going to contribute to a downwind monitor, which by the way, is attaining air quality standards. It is not projected to exceed the air quality standards, but nonetheless, they used that modeling to somehow tie Texas to that rule.

Mr. GREEN. And my next is about flex permits, but I appreciate TCEQ. I probably have the most monitored district in the country.

Mr. SHAW. Yes.

Mr. GREEN. Five refineries and lots of chemical plants, both TCEQ, EPA, my local Harris County pollution control agency. The industry now to their credit is fence line monitoring because they don't want to get blamed for what their neighbors are doing because we have them literally fence to fence.

There is data available instead of doing, you know—you can actually get real-time data on whether we are contributing to Illinois and Indiana's pollution from central and east Texas, but like I said, I come from an oil and gas area, not a coal area, so I will let Joe Barton and folks work on that.

On the flex permit, EPA's disapproval of the Texas Flexible Air Permit program and how the deflexing process is going, I know I have worked with all my plants along the channel and was concerned because on any given day, we have such huge facilities, if they have a slowdown in getting permitting, you are going to slow production. Can you tell how the deflexing process is going? Because it is the first time in history.

Mr. SHAW. It is the first time, and it is moving along. We have 65 facilities successfully deflexed. The key component to that, Congressman, is that there have been no environmental benefits associated with that. It has been a great bureaucratic waste of time and effort. All that has occurred has been lots of time and money spent and some loss of flexibility for those facilities. Quite frankly, it was and still should be a program that is held up as innovative and creative and the way we ought to be relating to industry to encourage and incentivize reduction.

Mr. GREEN. Well, I know some of the concern is that Texas had huge numbers of these flex permits compared to our neighbors in Oklahoma. You give us a hole, we will drive a truck through it. But it worked because the air quality had improved, and I understand the problem was that they couldn't understand the flex permitting, so they wanted all the paperwork to add up even though the results from the monitoring were still good and getting better.

Mr. SHAW. In fact, the requirement to get a flexible permit was that they had to model a facility on worst-case scenarios and so effectively they were having to overcome an even greater burden so that the worst-case operation would be protected, which is even more stringent than a typical permit requirement.

Mr. GREEN. Mr. Chairman, I can't see the clock. Am I out of time or have a couple of seconds left?

Mr. WHITFIELD. Yes, you have gone 30 seconds over.

Mr. GREEN. Oh, I apologize.

Let me just say, because the concern about underground injection, and I know our wells, and I know the Railroad Commission does that. We will submit questions.

Mr. WHITFIELD. Thank you.

At this time I recognize the gentleman from Oklahoma, Mr. Sullivan, for 5 minutes.

Mr. SULLIVAN OF OKLAHOMA. Thank you, Mr. Chairman.

Mr. Sullivan, I would like to ask you a couple questions. You stated in your testimony that the former Region 6 Administrator Armendariz met with your organization in 2010 and made it clear "he intended to initiate an attack on oil and natural gas producers within Region 6." Could you tell us more about that meeting and why he gave the impression that he would be aggressive with the oil and natural gas producers?

Mr. SULLIVAN. Yes. You are referring to a meeting 2 years ago this week, actually our annual meeting of the OIPA, and we invited him to come to present, and there were probably 600 Oklahoma

producers at that meeting. How many of them attended the actual session he was involved in, I can't tell you. But I do know that when they came out of that room, there was concern because the theme of his remarks was, there is a new sheriff in town and we are going to enforce oil and gas regulations with vigor. So that was the first straw in the wind that we had frankly, and the attitude listening to him by our group was one of fear.

Mr. SULLIVAN OF OKLAHOMA. Wow. While he has resigned, do you continue to be concerned about the aggressive rhetoric and actions of the EPA from that meeting and going forward with what you have in some of the actions they have taken?

Mr. SULLIVAN. Well, I am not here to pile on Mr. Armendariz's remark, but in the context that is indicative of an attitude and a messaging that is coming at us every day, I am very concerned about it, and let me mention something that has not been mentioned in this hearing. One of the two biggest ingredients in our business are technology and capital, and capital comes towards any business or industry where it is invited. It flees where it is discouraged. And with this kind of air or threat, if you want to call it that, of overreaching by EPA into our industry, that capital can very easily go anywhere else.

Last year, calendar 2011, I plowed back 130 percent of the cash flow from our little company. Well, how did you do that? Well, I put all mine back on the table and went out and attracted some other capital. In sitting with those people who I am asking to write checks to go drill wells for, they are reluctant to put money into an industry that has this kind of overreach, the cloud there. So when these messages are being sent, not just from Mr. Armendariz but from the entire EPA experience where we deal with them along the way, it is very harmful to our company. As I testified, every dollar we put into the business, there is $5 of benefit. So that is the way I kind of measure it is, is it scaring away money?

Mr. SULLIVAN OF OKLAHOMA. Well, do concerns about EPA regulatory overreach impact economic growth? You talked about that, job creation, and, you know, one of the things that—one of the biggest complaints I get when I go around the district or Oklahoma or in the country, for that matter, it kind of underscores what you said, is that they say, "What are you politicians going to do to create jobs?" You know, unemployment is high, unacceptable levels, and the thing is, we don't create jobs. Politicians don't, but we can get out of the way. And regulations, some are very necessary but there is an overreach out there right now, and it is keeping a lot of cash on the sidelines. The cash is not the problem. Capital formation is there. Their debt is cheap. There is a lot of private equity. Interest rates are low. But there is still a lot of money on the sidelines, like you were talking about, Mr. Sullivan, and this cash is not going to go to places that have so many barriers there and uncertainty, and that is what we can do to create jobs in America, especially in this industry, is if we can just get out of the way. And any regulations going forward should have some cost-benefit analysis and address how it affects job creation and global competitiveness and how fuel prices will go up and how it affects electric reliability. And so I think that your testimony is extremely important, and thank you so much.

Mr. WHITFIELD. Thank you, Mr. Sullivan.

At this time I recognize the gentleman from California, Mr. Waxman, for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman.

Dr. Armendariz is not here today but he apologized for the comments he made 2 years ago in DISH, Texas, and he resigned. He also made it very clear that his comments were an inaccurate way to describe EPA's enforcement efforts. Critics of EPA claim that his comments provided "a rare glimpse into the Obama administration's true agenda." They claim that "EPA's general philosophy is to crucify and make examples of domestic energy producers so that other companies will fall in line with EPA's regulatory whims." They interpret his comments as proof that EPA is happy to take enforcement actions against companies regardless of whether they violated the law.

Mr. Mintz, you are an expert on EPA enforcement. We are looking to you for a reality check. Who at EPA is making decisions about when to bring an enforcement action in specific cases? Are the decisions made by political appointees?

Mr. MINTZ. No, sir, not at all. They are generally made by career staff on a case-by-case basis.

Mr. WAXMAN. Do EPA Regional Administrators dictate whether EPA takes a specific enforcement action?

Mr. MINTZ. Not typically, no.

Mr. WAXMAN. We have heard claims that Dr. Armendariz's unfortunate remarks about crucifying oil and gas companies reflect the hidden agenda of the Obama administration. Mr. Mintz, based on your own research on EPA enforcement, does the Obama administration's approach to enforcement differ significantly from past administrations?

Mr. MINTZ. No, it does not.

Mr. WAXMAN. And the facts support that statement. According to nationwide enforcement data provided by EPA, the Obama EPA has taken fewer civil enforcement actions on average than the Bush administration. The same holds true for Region 6, which Dr. Armendariz led. The average amount of annual civil penalties across the country has not increased, either. So that is the big picture.

Let us take a couple of examples from this panel. Mr. Short, the regional haze issue you raised today isn't an enforcement issue, is it? This involves air rules and implementation plans. Isn't that right?

Mr. SHORT. That is correct. The State has responsibility along with EPA to develop and implement a plan to address the regional haze piece.

Mr. WAXMAN. And EPA issued a proposed rule on the State Implementation Plan a few days ago indicating that the parties should discuss the issue to see if they can resolve it. Isn't that right?

Mr. SHORT. Yes.

Mr. WAXMAN. Mr. Etsitty, are there areas where the Navajo Nation EPA has worked well with EPA? Are you supportive of their enforcement approach with regard to the remediation of abandoned uranium mines?

Mr. ETSITTY. Thank you for the question. Yes, we have had good working relationships with EPA Region 9 and Region 6 addressing the problem of abandoned uranium mines and the cleanup necessary.

Mr. WAXMAN. Well, Dr. Armendariz's poor choice of words did not represent some sinister, previously undisclosed EPA enforcement policy or philosophy. Frankly, the absurdity of the anti-EPA rhetoric coming from the other side of the aisle and from some industry groups is stunning. These extreme accusations are completely divorced from reality. EPA should be enforcing the laws on the books. That is common sense. Career professionals have been doing that important work for the last 40 years. Congress should be supporting their efforts, not attacking them with fact-free rhetoric.

Thank you, Mr. Chairman. I yield back.

Mr. WHITFIELD. At this time I recognize the gentleman from Texas, Dr. Burgess, for 5 minutes.

Mr. BURGESS. Thank you, Mr. Chairman, for the recognition. I want to thank our witnesses for being here today.

You know, it is a shame that Dr. Armendariz could not be here. It would have been good to get his perspective on things. He obviously said the things he said that many in my district—because the concern of the people on the ground in DISH, Texas, about what they saw happening in their community and Dr. Armendariz went there because of that concern that had been expressed to him by the mayor and other people in the town. I am just absolutely stunned and puzzled by Mr. Waxman's comments where he says that Dr. Armendariz did not result in any additional enforcement action. So what was accomplished? He got some headlines. He lost his job but he got the attention that I guess he sought, but what about the long-suffering people of DISH, Texas? Did they get any remediation for the problems for which they sought a solution? And what did happen, and I will just tell you this, as a consequence of that night, the public perception that their safety and health was being protected, whether it be by the State agencies, the Federal agencies, local agencies, the public perception was badly damaged.

Now, Mr. Smitherman has already eloquently outlined just how important the oil and gas industry is to our State. We didn't know about the recession until a full year after the rest of the country found out about it because of, in my area, the Barnett shale and the production of natural gas from that shale formation and the jobs that resulted from that. So it is an integral part of the economy and they are all linked together. So I would just ask the question of Dr. Armendariz if he was here, what did you attempt to accomplish and what do you think you did accomplish by making remarks like this?

Now, unfortunately, with Dr. Armendariz, there is a history of not meeting with people. I reached out to him at several points to have a discussion. I had met with Richard Green, the previous Region 6 Administrator in the Bush administration, had a good relationship, we met several times over the 6 years that he and I communicated in the 26th District. I met with Mr. Coleman since Dr. Armendariz has left so I have already established a relationship with his successor. I was not successful in securing a meeting with

Dr. Armendariz and then as we all know, at the end of April, the Deepwater Horizon blew up and that took a lot of his time. So unfortunately, it just never happened, but it wasn't for lack of trying on my part.

Let me just also reference the comments that were made by Chairman Emeritus Barton, or the question that was asked actually by Mr. Rush to Chairman Emeritus Barton about the health officials, and I would welcome the opportunity for health officials to come to this committee. Dr. Shaw, as you know, shortly after I met with you all, or I guess we had a conference call in May of 2010, I also invited in the folks from the Department of Health Services in Texas because there was an ongoing investigation as to cancer clusters, particularly in Flower Mound, Texas, but other areas as well, and although those results were preliminary and I have not been informed that anything has changed, the resultant study of the cancer cluster revealed that there was no anomaly. And again, I have not had any recent follow-up from them to tell me that that is different, and maybe that would be a good question to ask.

Mr. Smitherman, I think you said it so well. We need you all, your State agencies, TCEQ and the Texas Railroad Commission, we need you to be functional and working organizations and we need for the public to have confidence that when you are working, you are there on the job, the cop on the beat to protect them and additional help is needed from the EPA. If it is required, great, they are there as an ally, not as someone who is going to come in with a bludgeon and try to destroy what you are doing. I just welcome both Mr. Smitherman and Dr. Shaw to make comments on that. You guys have seen this on the ground. Mr. Smitherman, I guess you weren't there when DISH was having all the problem, but since then, let me just ask you the question, did Dr. Armendariz do any good for the long-suffering people of DISH, Texas, with his remarks that night?

Mr. SMITHERMAN. No, he didn't do any good, and again, what we come back to at the Railroad Commission is, these investigations should be grounded in science and the facts, not in an anti-fossil fuel agenda, because when they are grounded in science and facts and the facts do come out and it is determined without question that the gas was naturally occurring, it was from a different formation, it was unassociated with the drilling activity in the Barnett shale, that gives everyone the confidence to allow this process to continue, and this process is creating this wonderful bounty of oil and gas that we have leading us to energy independence and creating great jobs, not only in Texas but throughout the Southwest and across America.

Mr. BURGESS. Dr. Shaw?

Mr. SHAW. Let me, if I can, quickly say that the role of TCEQ is the enforcement agency for environmental rules in the State of Texas, so we were engaged in DISH in enforcement and the reason that we don't see an impact of what Dr. Armendariz accomplished is because we were already on the ground. We were already there making certain that those rules were being followed and were being protective, so that was not—there was not a need for him to step in.

Mr. WHITFIELD. The gentleman's time is expired.

At this time I recognize the gentleman from Texas, Mr. Gonzalez, for 5 minutes.

Mr. GONZALEZ. Thank you, Mr. Chairman.

Before I pose any questions, I want to give some context. More activity logically means more attention, so this is a story from the San Antonio Express News way back in July of 2010. We could update it on the numbers. Texas supplies 20 percent of U.S. oil production, 25 percent of natural gas, 25 percent of refining capacity and 60 percent of chemical manufacturing. So I think there is a lot of activity.

Now, there are consequences to that. This is from a story on January 12, 2012, from the same newspaper, San Antonio Express News. Texas coal-fired power plants and oil refineries generated 294 million tons of carbon dioxide and other heat-trapping gases in 2010, more than the next two States combined. Those two States happen to be Pennsylvania and California, by the way. Too bad my colleagues are not here.

So there is probably going to be more EPA activity in Texas for all those reasons. Now, the question as posed by some of my colleagues and a legitimate concern is, what is going to be the economic impact, so I will just go all the way back to a September 2011 Express News story again, and that is that the Texas oil and gas industry actually was back at pre-recession employment highs as of June 2011. So despite this onerous EPA regional director, obviously Texas is still doing fairly well, all things considered. So that is context.

So what I want to ask my two chairs from the great State of Texas is simply, is the United States' health and environment better as a result of EPA? Just yes or no.

Mr. SMITHERMAN. Well, let me say in particular, Congressman, in Texas, a lot of the benefits we have seen are the result of increased use of natural gas to make electricity. So natural gas is a very clean fossil fuel and we are using more of it.

Mr. GONZALEZ. And I know, Mr. Chairman, my time is so limited. The coal-fired plants in Texas contribute about 61 percent of the greenhouse gases, and I am all for natural gas. I mean, we are producing. We don't know what to do, we have so much out there. I am just asking a simple question for the legitimacy of an agency such as the EPA, which obviously was created during the Nixon administration: Are we not better as a Nation for the work of EPA? Chairman Smitherman?

Mr. SMITHERMAN. Here is my response. When the EPA's regulations are grounded in science, then they should be legitimately adhered to and followed, but if you look at the CSAPR rule, the MACT rule and the greenhouse gas rulemakings that are occurring, I would argue that they are not grounded in science.

Mr. GONZALEZ. But my question is a simple one. I will get to the science if I can get in my last minute because my next question is going to be about science. Is this country's health and environment, conditions of our health and environment, better as a result of the EPA to date?

Mr. SMITHERMAN. Well, I would speak to Texas where we have reduced SO2 and NOx dramatically over the last 8 to 10 years for

a variety of reasons. I would not fully attribute that to the EPA's actions.

Mr. GONZALEZ. Chairman Shaw?

Mr. SHAW. Congressman, I would suggest that during the last 3 years, our ability to continue improving the environment in Texas has been diminished because of actions by the EPA. That is, some of our tools that we use most effectively to achieve environmental reductions have been taken away from us. The flexible permit and others have been taken away from us. I would like to refer to it as EPA forcing us to chase the wrong rabbits. We are chasing agendas that don't have the environmental and health benefits associated with them, and that takes away from our ability.

Mr. GONZALEZ. And I understand that, but I think both of you are still not addressing the central question is that there is a Federal role to be played as long as it is in a cooperative, collaborative spirit. The attacks today are that we don't have that, and I am just saying, OK, what is going to be reasonable under these circumstances. Both of you say that good science is not being followed. I will tell you now, when I was a judge, we had expert scientists. We had experts all the time. One side would hire one, the other one would hire one, same facts, same figures, different conclusions. The only way we ever got around that was if we could have some sort of a neutral arbiter that both sides would agree was a recognized expert and then the court would run that particular list, appoint somebody.

So I am going to ask both Mr. Smitherman and Mr. Shaw, who should be the arbiter of what is good, acceptable, credible, legitimate science?

Mr. SMITHERMAN. I would say it should be done in a collaborative way. The Cross State Air Pollution Rule is a great example of a rulemaking that went forward without any input from anyone in Texas, industry, regulators, citizens or anyone else.

Mr. GONZALEZ. I could agree with the proposition that that is accurate, of course. It makes sense.

Mr. SHAW. And that is the challenge, Congressman, is that we have not had the opportunity to discuss that science because EPA has failed to engage on the science because that is the ground we can work with. And, unfortunately, EPA's message has been, we are not interested in the science and even following the law. They want to have, for example, the flex permit program go away even though they didn't have a scientific or legal reason to make it go away.

Mr. GONZALEZ. And I understand the flex issue. If you are from Texas, you are a little more familiar with it because we have had great discussions at the EPA and with Dr. Sunstein.

I yield back. Thank you for your patience, Mr. Chairman.

Mr. WHITFIELD. At this time I recognize the gentleman from Kansas, Mr. Pompeo, for 5 minutes.

Mr. POMPEO. Great. Thank you, Mr. Chairman.

I want to talk about a specific provision that is in the Clean Air Act, but before I do, Representative Waxman talked about the fact that we thought that the former director of Region 6 was enforcing some hidden agenda. There is nothing hidden about this agenda. I don't think anybody that could reasonably look at what is going

on—you can read it on the pages of Sierra Club. We start with beyond coal, we go to beyond oil to now beyond natural gas. We are beyond common sense is where we have really gone today, and so I don't think there is anything hidden about the attacks on the fossil fuel industry from coal and natural gas and all the others.

I want to talk about the general duty clause of the Clean Air Act. I started to read about lots of enforcement actions under this provision. It is exactly what it says. It is a general duty. It says a stationary source has a general duty to be safe when handling extremely hazardous substances. There is no definition for safe. There is no definition for extremely hazardous substance. And Region 6 is the perfect example of what happens when you have provisions that are this general. They engaged in over 83 oil and gas production inspections and wrote over 23 administrative orders under Section 112(r) in Region 6 with hundreds of thousands of dollars in fines.

In their own report, they talk about using infrared cameras in the Barnett shale area to find gases that are escaping and issuing citations under the general duty clause. They conducted aerial surveillance in Oklahoma. Mr. Sullivan, I don't know if they were looking for you or if this was a more general expedition using aerial surveillance to find gas leaks at different places.

I just wondered if any of you, Mr. Smitherman, Mr. Shaw, Mr. Sullivan, have any comments on the impact of the enforcement techniques being used under Section 112(r), this general duty clause, any of the three of you.

Mr. SHAW. Sure, Congressman. I will certainly chime in. We use the infrared camera as a great tool. One of the things that—back to the science and making sure that we have enforcement that makes sense and is fair and just is to recognize that that technology is not able to quantify emissions. It can identify when there is an emission occurring but we always follow up with our proven technologies to make sure we can quantify and accurately determine what emissions are so that we can take the proper enforcement action if and when necessary.

Mr. SMITHERMAN. The only thing I would add, Congressman, is earlier we heard about the deterrence theory of enforcement, and I would say this is an extremely slippery slope. If we are going to allow regulators to go forward without any evidence just because there might be a problem, then we have completely unbridled regulation and that should never be the case. It should be always grounded in a reasonable belief in science.

Mr. POMPEO. I appreciate that. I am actually drafting some legislation to try and force the EPA to put definitions around this and quantify and use science-based approaches instead of a very general, very unspecific thing that is just prone to enforcement abuse and enforcement that is inconsistent across regions and across the country.

With that, I yield back my time, Mr. Chairman.

Mr. WHITFIELD. The gentleman's time he yields back.

At this time I recognize the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you, Mr. Chairman. I appreciate all of our witnesses being here today.

I would like to start with a little correction in history. While we have been referring to Mr. Armendariz's comments, he got his history all wrong. It was not the policy of the Romans to go into a village and crucify people to hold the village in check. There may have been—because history is not complete, there may have been a rogue actor somewhere along the way, but I think it is important that we don't perpetuate his statement as if it were fact. It may have been his opinion but it was not historical fact. And in the history of Western tradition, obviously there have been many brutal acts committed along the way but with rare exception, it was not the policy of any regime to execute individuals in any manner willy-nilly without some cause. We may not have agreed with that cause but generally—there are some exceptions but generally that has not been the case. So I would hope that anybody who might be studying this would not be thinking that that was real history. It may be history in his mind but not facts.

That being said, Mr. Shaw, you started on one of the questions previously to talk about the last 3 years and the fact that you have lost some of the weapons that you have had to try to make health concerns better. Could you expand on that for me, please?

Mr. SHAW. Sure. Thank you. It ties into the reason that the concerns or the statement that Dr. Armendariz made were concerning. It is not because of the statement itself, it is because it was reflective of what wasn't a rare glimpse. It was a common thread where we see the current EPA willingness to circumvent good science, to circumvent their own regulations. And that showed up not only in some of the enforcement cases you have heard today, but it was also very prevalent in the Flexible Permit program, which is an innovative process that we had that was and should be held up as a very necessary process for moving forward to get additional reductions in emissions. It is prevalent in the process that was used in the Cross State Air Pollution Rule whereby EPA subjected Texas to that rule without the opportunity for us to comment on data and correct those data so that we could indeed have more meaningful regulation.

Having that does a couple things. One, it makes us chase the wrong rabbits. We spend resources, time, money and others, trying to get these improvements where there is no real environmental benefit because the science is not there and the benefit is not real.

Mr. GRIFFITH. Are you saying that you are chasing the wrong rabbits because they may be basing their opinion on some false fact or some false historical fact like the previous one mentioned or some other false science and therefore you are having to chase that down and correct that record before you can go on to help clean up something that is a real problem?

Mr. SHAW. It is both: Bad data—which is unfortunate, in this day and time we should all make sure we have the best data, we would have been happy to have provided more accurate data to EPA for their analysis; it is also their analysis that they utilize, which again is very difficult to analyze because they are not forthcoming in sharing that process. And then finally, it is the way they apply. For example, to be very brief, but in the CSAPR, the Cross State Air Pollution Rule, EPA was subjecting Texas at the time to a 47 percent reduction in SO2 emissions from July until Decem-

ber—we were supposed to come up with those reductions—based on a model which is flawed and very challenging to use, in any case, that predicted that we would have a .18 microgram per cubic meter, a very, very unmeasurable component, to a monitor in Granite City, Illinois, which you couldn't measure, couldn't monitor, and at the same time, EPA's own data show that that monitor is in compliance and will be projected to be in compliance continually. And so we were going to be looking at spending millions of dollars for no real environmental benefit, and ultimately what you see, the common denominator of many of these rules, it was going to put much coal and other electric generation out of business.

Mr. GRIFFITH. And that touches on Mr. Sullivan's comment that if you are using capital for these things, you don't have capital available to expand other jobs or industries. Is that correct?

Mr. SHAW. That is correct, and quite frankly, our generation capacity in Texas is suffering because people are hesitant to build new generation capacity because of that uncertainty.

Mr. GRIFFITH. And Mr. Etsitty, am I correct in assuming that if the facilities that you mentioned in your testimony are not allowed to go forward, that that will cause economic stress and loss of jobs in the Navajo Nation?

Mr. ETSITTY. I thank you for the question, Congressman. Yes.

Mr. GRIFFITH. And would it be fair to say that if you had a similar situation like my district, which is heavily dependent on coal, both for jobs and production of electricity, that the same would be true there or any other area of the Nation where people are relying on their natural resources?

Mr. ETSITTY. I would say it is a similar situation, yes.

Mr. GRIFFITH. And so the policies of the current administration by not working with you all are in fact killing jobs or could kill jobs?

Mr. ETSITTY. That is correct.

Mr. GRIFFITH. Thank you. I yield back my time.

Mr. SMITHERMAN. Congressman, if I may add, in Texas, had we not got a 6-month delay in the CSAPR rule, we would have seen two coal-fired plants shut down and the elimination of at least 500 good-paying jobs.

Mr. GRIFFITH. Thank you very much for the addition.

I yield back.

Mr. WHITFIELD. At this time I recognize the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

Thank you all for coming. We have gone down this path numerous times, and part of it is the administration's own doing, and we aired the clip from his San Francisco Chronicle editorial board in which he basically says, "My goal will be to bankrupt the coal industry." Isn't it any wonder why that sector is concerned, the fossil fuel sector in this country? And then you add to the Region 6 Administrator down there, boiler MACT, mercury MACT, cooling towers, attack of current generation, attack on future generation greenhouse gas rules.

And Dr. Mintz, just a quick answer. I should really read your analysis a little bit better. Have you done stuff on EPA—in your analysis, have you done things on the costs of compliance and liti-

gation before the rules get promulgated, the cost to business, the environmental community going and using the courts versus regulation, court ruling and then the judgment fund paying off the litigants? Have you done any analysis on that and the cost or the effect of doing business?

Mr. MINTZ. Well, no, sir. Most of my research on enforcement doesn't focus on those issues, which are really policy issues and regulatory issues.

Mr. SHIMKUS. But you would agree that there is a cost of doing business if there are processes moving to a regulatory regime and different communities going through the courts to try to get a new standard outside of their whole regulatory process kind of shortening their ability? You would agree with that, would you not?

Mr. MINTZ. I am not sure I understand the question, sir.

Mr. SHIMKUS. Well, it is really a statement. What we know is occurring is the environmental community goes to the Federal courts, we think on encouragement by the environment community, to get a judgment that creates a higher standard versus them going through the regulatory process. And then they use the judgment fund to reimburse the environmental lawyers. Maybe you want to look into that as another research project, and we can have you back and talk about that.

Mr. MINTZ. Well, I will be happy to do that.

Mr. SHIMKUS. No, it is——

Mr. MINTZ. If you would like me to respond, I don't know if you——

Mr. SHIMKUS. Well, no, I actually wanted to go to Mr. Sullivan because he made a point on, you are not Big Oil. So let me go through these three Big Oil tax cuts and tell me why you say that is normal business expenses. Expensing intangible drilling costs, why is that normal business?

Mr. SULLIVAN. Well, first of all, it is a funny phrase to most nontax folks.

Mr. SHIMKUS. You are going to have to go quick to get through all these.

Mr. SULLIVAN. OK. It is the part of the cost of drilling a well, and we are allowed to deduct that just as anybody running an apartment house or anything else would deduct expenses, but it has become a lightning rod because it is the oil and gas business.

Mr. SHIMKUS. So bottom line is, it is the cost of doing business, so if you are doing income and revenue, you have got to take off the expenses and that is part of the expenses of operating a business.

Mr. SULLIVAN. Right, roughly 30, 40 percent of the cost of a well.

Mr. SHIMKUS. How about the manufacturing tax deduction for domestic oil and gas companies?

Mr. SULLIVAN. As I understand it, that applies only to very large companies over 500 employees or something of that sort.

Mr. SHIMKUS. They define themselves as manufacturers so they are getting the same manufacturing tax break that any manufacturing company is getting, correct?

Mr. SULLIVAN. That is correct. Dollar-wise, it means——

Mr. SHIMKUS. No difference?

Mr. SULLIVAN. Right.

Mr. SHIMKUS. What about the percentage depletion allowance?

Mr. SULLIVAN. Well, that just simply—it is an akin deduction to depreciation of an apartment building. We have a wasting asset down there under the ground.

Mr. SHIMKUS. So you are telling me that the attack on Big Oil and their sweetheart tax deals is current tax law that applies to anybody who is in business?

Mr. SULLIVAN. I believe. I am not a tax expert but I believe that the major oil companies are not entitled to percentage depletion. I think they are forced to do cost depletion.

Mr. SHIMKUS. Yes, I have got the Illinois oil basin, a lot of marginal producers. These are the ones that are getting lumped in. And would we have marginal oil well production in a lot of the small basins in this country without these provisions?

Mr. SULLIVAN. I think it would not only terminate the lives of some wells that are on hospice, which are marginal wells, but it would also prevent—or reduce the cash flow for drilling new wells.

Mr. SHIMKUS. I have never heard that terminology. I might use that one of these days.

Yes, sir. I am trying to figure out which one you are. Real quickly on——

Mr. SHORT. Me too.

Mr. SHIMKUS. You said that the haze ruling, the change is imperceptible to the human eye, did you not?

Mr. SHORT. That is exactly what I said, to go from $77 million, which is what the State plan called for and met all the goals and objectives, to $705 to $800 million, it is imperceptible to the human eye.

Mr. SHIMKUS. So why would we do it?

Mr. SHORT. That is exactly our point. Why would we do it? And we have been trying to sit down with EPA for a long time, even though the Congressman asked me, will they sit down and talk with us. The answer is they are supposed to. They didn't in this case, and as a result, we are continuing to ask for that meeting to sit down and talk because we think we can come to a resolution. We just don't think spending $77 million or $805 million is a good investment in resources and dollars, and certainly from that perspective, the customer is going to have to pay for it.

Mr. SHIMKUS. Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time I recognize the gentleman from Texas, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the chair, and welcome to the witnesses. Thank you all for your time and expertise, and a special welcome to Commissioner Smitherman and Commissioner Shaw. I know back home, the Aggies of Texas A&M University have a little more swagger in their steps with you guys up here testifying before Congress today, so thank you all for coming.

And before I get to my questions, I want to publicly express my disappointment that the lone witness for the first panel, the former Region 6 Administrator for EPA, Al Armendariz, canceled out and did not testify before this committee today. I represent Texas 22. Over 920,000 people depend on me up here in Congress to speak with their voices and get answers to their problems back home in Texas, and because they are very concerned that a former Regional

Administrator had a political agenda. His agenda wasn't about any sort of clean water, clean air. It was an agenda about getting rid of American production of energy, specifically, fossil fuels—oil, gas, coal. They deserve answers, and unfortunately, he did not come up here today and give me a chance to get those answers.

There is no need for me to bring up Range Resources. I mean, my good friend Joe Barton, former chairman of this committee and coach of the Congressional baseball team on the Republican side, knocked that thing out of the park and so I don't want to talk about that.

But I do want to focus on a developing problem in Texas, and it is with EPA as well, and it is the Las Brisas Energy Center in Corpus Christi, and so my question is primarily for you, Commissioner Shaw, but Commissioner Smitherman, if the spirit moves you to get involved, please make some comments. But this project right now—we have the second most populated State in the Nation and the fastest growing State and we are expected to have a 2,500-megawatt shortage in generating capacity, the equivalent to five large power plants, in as little as 2 years. So we need power plants being built. The Las Brisas Power Plant is being built right there in Corpus Christi, Texas, a 1,320-megawatt electric power generating station that will bring 100 percent petroleum coke, a byproduct of nearby refineries in Corpus Christi in the Gulf Coast. It will generate enough power to provide power to more than 850,000 homes. And after a 3-year permitting process, the Las Brisas Energy Center received his final prevention of significant deterioration, its PSD, from the Texas Commission on Environmental Quality. But due to EPA's new greenhouse gas regulations released after Las Brisas Energy Center received its permit from PCQ, the project may have to begin the permitting process all over. Las Brisas could actually provide a net reduction in greenhouse gas emissions by locally sourced petroleum coke—by using locally sourced petroleum coke more efficiently and effectively than greenhouse gas emissions from shipping. So my question for you, Chairman Shaw, is, can you give us an update on your progress with EPA on Las Brisas?

Mr. SHAW. I have to be somewhat cautious in discussing it because it is a case that is going to be coming back before my agency so I can't, for ex parte communication, can't talk specifics about that case. But I will concur that the process you laid out is accurate, and with regard to the greenhouse gas regulation requirement, it is somewhat challenging that we have many of these rules that are up in the air and pending, and as we try to have additional resources built to generate electricity, the clock never stops. We get through the process of permit application and then there are new regulations that come out of EPA, and those also apply. And so there is some challenge with how we ever move forward to getting one completely permitted and able to be built when there is this continued uncertainty that is associated with that, the greenhouse gas permitting requirement being one of those, and the challenge of getting EPA to timely act on issuing those greenhouse gas permits because the State of Texas, you are aware, has not agreed to accept that responsibility of regulating greenhouse gases and writing those permits. So it is an ongoing issue, and it has the

great potential to exacerbate that problem that you lay out where we imminently need more production. We have about a 2 percent growth in energy demand each year and somewhere about 1–1/2 percent, I believe, of new generating capacity being brought online and that is not improving because of the uncertainty associated with pending regulations.

Mr. OLSON. Thank you. Again, our first panelist couldn't be here today so I am not asking you to read his mind, but do you think the fact that he was retained to testify against Las Brisas prior to his role in EPA, do you think that had presented a conflict of interest?

Mr. SHAW. Certainly, if one looks at the challenges that Dr. Armendariz faced, it appears that he had a difficult time transitioning from his role prior to being Regional Administrator. Much of that we have talked about in the Barnett shale and others where he seemed to not be able to turn loose some of the activist activities he had taken prior to working with EPA. He seemed to have a hard time making that transition from someone who is trying to push for, as an activist, to a regulator, who has to balance and decide based on the facts and science and the issues. So it is not unreasonable to make that determination.

Mr. OLSON. Thank you. I yield back.

Mr. WHITFIELD. Thank you.

At this time I recognize the gentleman from California, Mr. Bilbray, for 5 minutes.

Mr. BILBRAY. Thank you, Mr. Chairman.

Mr. Chairman, before we start, I would like to say I am sorry that the witness in the first panel didn't show up, and I think there is one thing that both sides of the aisle here on this panel can agree on. I think we would all be shocked if a local law enforcement officer went into the suburbs of, let us just say Chicago, and had a punitive attitude about a small businessman or somebody engaged in their neighborhood activity and came out with an attitude that somehow we are going to sock it to one guy to set an example for the rest of the community that, you know, "I am here to enforce the law and even if it is a little overbearing, I am going to do it, I am going to profile this guy and we are going to make a point." I think we would all be outraged at a local law enforcement officer doing that.

And as somebody who has worked with environmental enforcement, I think we should be just as outraged when a Federal law enforcement officer for an environmental group takes the same attitude. I think it is not just unfair, I think it is immoral and I think it is outrageous when we think about the fact that we will not accept local people being paid with government funds, taxpayers' funds and then being punitive against a citizen, but we are kind of not shocked that when a Federal bureaucrat takes the same attitude with the same punitive attitude being paid by the same taxpayers. I think we should be just as outraged that this is a violation of everything that this country stands on and it matters just as much if the Federal Government is the bad guy here as it would be a local guy, and I think we have almost got this attitude that well, if they are environmentally leaning, we can justify it. That is the same kind of attitude that justified vigilante groups saying

well, it is law enforcement, it is public protection justifying this violation of common decency and fairness, and I think both sides should be able to address that.

Now, I will say this and I will move on. As somebody who has supervised environmental agencies, I mean, let us face it, the air districts in California are pretty darn powerful. I managed one for 3 million population, bigger than 20 States of the union, and the air resources board has got a whole lot of environmental stuff. I would never accept an Administrator taking the kind of attitude that I heard being stated by a Federal Administrator, and I think this is one thing that we should be able to address.

Doctor, I want to get to the details of what you are doing over there. Isn't it true that the original legislation of the Clean Air Act was sold to the American people and to Congress based on the fact that it was targeted to protecting the public health where no other strategy was going to be able to protect that public health and the innocent bystanders who were going to be impacted by one person's activity on their public health? Wasn't public health the real backbone of the selling of the Clean Air Act?

Mr. MINTZ. Well, yes, that is the stated objective of the Act, to protect public health and the environment, and that was always at the root of it, still is, I believe. The language hasn't changed.

Mr. BILBRAY. And what we have done is that there has been things like the clear sky issue and the modification of crossing away from the public health, which justified the heavy, strong actions that we have taken that have economic impact. We have moved away from that into fields that were never intended originally by either the public that wanted the Clean Air Act or those who passed it originally and now we have reached a situation where we get these conflicts with what has been happening in New Mexico and the way the EPA has handled that comes right into conflict with—I am trying to remember the California law—oh, 1368 and comes into conflict with our strategies on greenhouse gases where now you are saying that California is going to be forced to change our greenhouse gas strategies because it appears to be in conflict with what EPA is trying to do in New Mexico, and, that is, our people are saying we cannot legally pay for electricity if that electricity rate is going to pay to retrofit a coal plant that is being mandated by the EPA. Doesn't that create sort of a catch-22 between Federal and two States?

Mr. MINTZ. Well, that has been an argument that has been made in litigation and there were counterarguments made in litigation as well, and I guess that is before a court. I think the Clean Air Act has been changed over time. It was amended in 1990 to add some provisions including the haze provision that was mentioned earlier. At the same time, the fundamental structure of the Act was not altered in 1990 and the thrust of the Act toward protecting the public health has not changed and that is still an important part of the statute.

Mr. BILBRAY. Well, let me tell you something as somebody that was on the air resources board at the time, we were very concerned about the modification in the early 1990s and we warned the Federal Government of mistakes they were making, and in fact, if you remember, that was the time they started requiring those of us in

California to put methanol and ethanol in our gasoline when we warned them, the EPA, that it was a terrible mistake then. So mistakes have been made, and it is interesting you bring that up.

I would just like to thank you very much for being here today and being able to raise these issues and hopefully we can get both sides working together to avoid these problems in the future.

Thank you, Mr. Chairman.

Mr. WHITFIELD. At this time I recognize the gentleman from Louisiana, Mr. Scalise, for 5 minutes.

Mr. SCALISE. Thank you, Mr. Chairman. I appreciate you holding this hearing and I appreciate the second panel for appearing before us today to answer the questions that we have. I share my colleagues' disappointment and anger with Mr. Armendariz for not showing up today. And if you go back, we have had many attempts by this subcommittee to bring him before our committee when he was in his official capacity at the EPA, and for whatever reason he was not allowed to come testify. The fact that now that he's no longer there, he had finally agreed to come testify and then at the last minute canceled out suggests that there may be some foul play, and I do think, Mr. Chairman, we ought to look into whether or not there was any influence, any bullying, any intimidation by the White House or EPA or anyone else in this administration to get Mr. Armendariz to not show up because he had finally agreed as a private citizen to come and answer some of the questions that our constituents surely have about the agenda he was carrying out at the EPA and the fact that this is not an isolated incident. If his was the only division within EPA that was carrying out this kind of radical agenda, it would be bad enough, but the fact that we are seeing it from other divisions within the EPA begs a lot of questions throughout their various regions but I think it goes well above his pay grade and the fact that he had agreed to come and at the last minute backed out suggests that there may have been some bullying and intimidation going on by some people who didn't want him to come here and answer these tough questions that many of us had. And so hopefully, Mr. Chairman, our committee can look into that because I think there are a lot deeper questions now to ask than just the ones we had for Mr. Armendariz before this hearing was scheduled.

Now, I want to go into some specific questions. Mr. Sullivan, you in your testimony talked about him coming before your agency, your organization, and speaking at, I guess, an annual meeting that you invited him to and from your testimony it seemed pretty clear that he was not just there to be a regulator. You know, in our view, a regulator is a referee, somebody that is showing up there with the zebra-striped jersey just calling—just implementing the rules, calling the plays as they see them and making sure that both sides are doing everything by the rules. From your impression, it seemed like that was not the case at all, that he was actually there to carry out an agenda, which is not the case of what a regulator is supposed to do. Can you share with us, expand a little bit on your experience?

Mr. SULLIVAN. Certainly, the impression—let me make it absolutely clear. I may be the only producer in the room, but I want to be clear that we as producers welcome regulation, responsible,

fair-minded, fair-handed regulation. We get that from the Oklahoma Corporation Commission, which is the equivalent of the Texas Railroad Commission.

Now, we also have to comply with certain Federal regulations, but mostly the oil and gas industry is regulated at the State level and it is our strong feeling that that is where it should stay because there are, as has been said, very uniquely, very separate and unique circumstances in each State having to do with everything from the rock to the practices to the streams and everything else and it is best handled at the State level.

But having said that, to the extent that we are involved in Federal regulation, we don't mind that as long as it is conducted the way the Oklahoma Corporation does and the Texas Railroad Commission which——

Mr. SCALISE. And just like we do in Louisiana where we fracture wells. You have to think 100,000 wells hydraulically fractured safely in Oklahoma——

Mr. SULLIVAN. There are 800,000 wells that have been drilled in Oklahoma back from literally 100 years ago, and I would invite you to come down. We don't live in a cesspool. It is very well regulated and very well implemented. So I think the main thrust of my remarks is that the attitude that came across from Mr. Armendariz is not unique to him, it pervades the EPA and we don't understand why it can't be as it should be, you know, collegial, fact-based interplay.

Mr. SCALISE. And I think, you know, if you look at agencies, take the FAA, for example, I mean, when there is a plane crash, it is a tragedy, yet you don't ground all planes. You go find out what happened in that incident and you do all the things you can with the science to make sure it doesn't happen again, but in the meantime, you allow the industry to move forward. I don't think we have seen that from this entire Obama administration as it relates to American energy unless it is wind or solar where they will take a gamble and a bet on something like Solyndra. But whether it is coal or natural gas or oil, there seems to be a bias against all of the above, surely not for all of the above, and if I can, Mr. Shaw and Mr. Smitherman, if you all want to add anything to the experiences you all have had as people at the State level who are dealing with the regulations and doing the things you need to do to try to produce and make sure your State can create the jobs that it does.

Mr. SHAW. Sure, and I will simply state that as the primary environmental regulatory agency in the State of Texas, the comments that Dr. Armendariz offered were, as you mentioned, indicative of the overall philosophy of the agency. And it wasn't the first time that we had heard him, and he wasn't the only one who made comments that concerned us with regard to their lack of following the rules and law. And he made that comment to his staff expressing what EPA's philosophy was, not as rhetoric at a town hall meeting. It was comments he initially made to his staff, and that is the concern, that it clearly illustrates that philosophy that is not successful for having a successful environmental program.

Mr. SMITHERMAN. Congressman, I would add to that, that the statements and the actions of the EPA in Texas would appear to have set in motion similar actions in Pennsylvania and Wyoming.

For example, in December of 2011, a draft report out of Wyoming said that the EPA believed there was a likely association between groundwater quality issues and fracking. That came after the EPA initiated in Texas. We now know that the EPA has walked back those statements in Wyoming and in Pennsylvania.

Mr. SCALISE. But the damage is done.

Mr. SMITHERMAN. Correct.

Mr. SCALISE. Thank you, and I yield back the balance of my time, Mr. Chairman.

Mr. WHITFIELD. Well, thank you very much, and I certainly want to thank the panel.

Before we conclude the hearing, Mr. Short, I noticed you appeared to want to say something when Mr. Bilbray was asking questions about the conflict between Federal law and State law as it relates to the San Juan Generating Station. Did you want to make additional comments about that?

Mr. SHORT. Well, I just wanted to agree with that. There are some issues with that. I also wanted to make it clear when Congressman Waxman asked a question about the EPA sitting down with us, the real question is getting them to the table. That has been a problem. We were not consulted during the rule itself and so that has been a problem, and again wanted to say that we did put a plan—New Mexico did put a plan together that would meet the objectives of the rule and EPA said it wasn't good enough and essentially just mandated the larger expenditure of, you know, $750—I said $705—I am getting my fives and zeros mixed up—with $750 to $805 million. So I wanted to be very clear on that, and there is problems with California as well increasing the level of mandates that we as utilities are required to meet now with this additional piece on top of it. It continues to drive the cost of serving electricity up to our consumers, which are your consumers as well.

Mr. WHITFIELD. OK. Well, thank you, Mr. Short.

I want to thank all of you for——

Mr. BURGESS. Mr. Chairman, just before we wrap things up, Mr. Scalise from Louisiana brought up an excellent point. I mean, Dr. Armendariz is not here today, and as a private citizen, that is his right. But I think we also should have available to us any information exchanged between Mr. Armendariz and the White House as to whether or not he would testify today because it seemed like he was quite agreeable to coming and defending his positions, and then he wasn't, and with all the stuff that we have been dealing with, with the backroom deals on the drug negotiations, I just feel like we need to look at that and find out if there in fact was any communication between Mr. Armendariz and the White House regarding his testimony here today because, as a private citizen, they should not interfere with that activity either.

I fully respect his decision not to come. That is his decision as a private citizen. But at the same time, we need to know the back channel information on that, and I would just encourage the committee to follow up on that, and I will yield back.

Mr. WHITFIELD. Well, thank you. As I said in my opening statement, we do intend to explore the reasons behind this.

So, once again, thank you for coming. The testimony was quite enlightening, and I must say that when—those people who are

dealing with Region 6 alone on a regular basis, we do from the testimony see a bias against fossil fuel, lack of collaboration and frequently insisting on FIPs instead of SIPs, which are frequently meeting the requirements of the acts that EPA enforces.

Mr. RUSH. Mr. Chairman.

Mr. WHITFIELD. Yes, sir.

Mr. RUSH. I have to respond to my friend from Texas's remarks. I mean, there is no basis for his allegations or his request for inquiry to the White House, and I don't know what that is based on. Certainly, to me, this speaks of proverbial witch hunting. I mean, you know, let us use the resources of the American people. Let us use those resources in a more productive manner.

You know, it is just kind of insane to be trying to determine whether or not the White House asked the proposed witness that he would come or not show up at this hearing. It doesn't make sense. And I certainly want to go on the record as being strongly opposed to that.

Mr. WHITFIELD. Well, thank you very much.

We do have very strong feelings about Mr. Armendariz, and I don't think there is any question that he has poisoned the well in the enforcement of EPA laws in Region 6. And he had agreed to come and then yesterday his lawyer said he would not come, and I don't know that we are going to take any formal action or not but we intend to have some further discussions with him and then obviously the committee as a whole would have to make any decision, but thank you for your comments and thank you all very much. As I said, it was very enlightening and we look forward to working with you as we move forward for hopefully a more collaborative effort at enforcing our environmental laws. Thank you.

The record will remain open for 30 days.

[Whereupon, at 12:27 p.m., the subcommittee was adjourned.]